Is Ivan Smarter Than Uncle Sam?

November 4, 1957

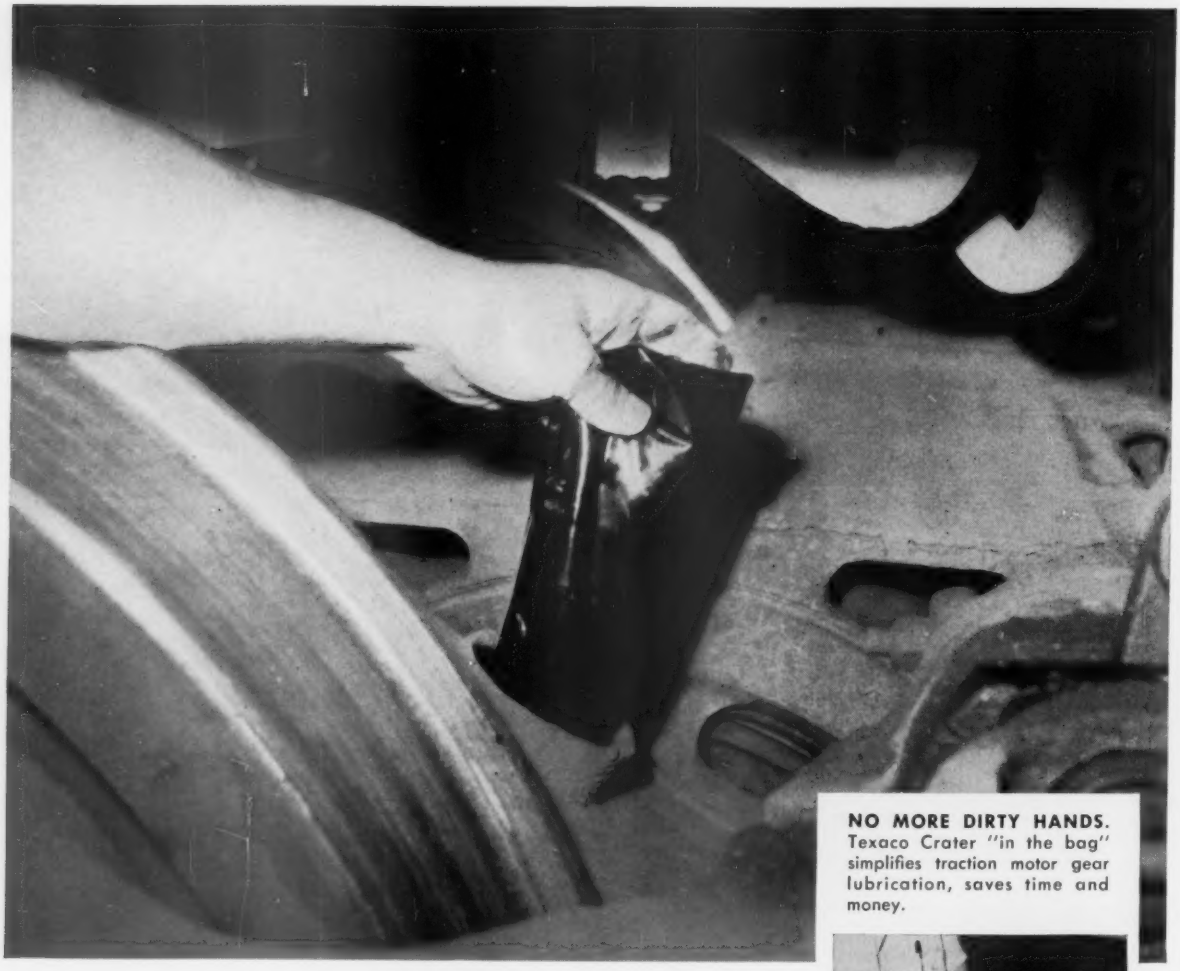
RAILWAY AGE *weekly*

↑ PRR's Symes: Car shortages ahead?

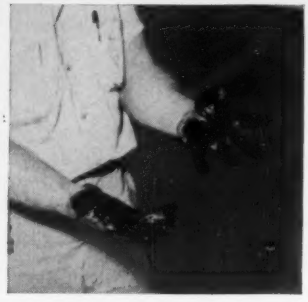
Freight Cars

Shippers get more of what they want

50 cents A Simmons-Boardman TIME-SAVER Publication



NO MORE DIRTY HANDS. Texaco Crater "in the bag" simplifies traction motor gear lubrication, saves time and money.



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The Texas Company, *Railway Sales Division,* 135 East 42nd Street, New York 17, N. Y.

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RAILWAY AGE *weekly* November 4, 1957 • Vol. 143, No. 19

Week at a Glance

Departments

Current Publications 54
Freight Car Loadings 57
Letters from Readers 12
New Equipment 57
New Products Report 46
People in the News 62
Railroading After Hours .. 35
Railway Market 57
Technical Tidings 61
The Action Page 64
Watching Washington 10

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'Why not a subsidy for railroads?' ..... p. 9

Tax funds pay deficits for other forms of transportation, last week's meeting of the National Association of Railroad and Utilities Commissioners was told, so "why should not public funds be available to aid the railroads, especially on commuter lines?"

Freight cars—Shippers get more of what they want p.19

American railroads are facing a period of great opportunity—if they're prepared. Because this country's population is heading rapidly upward the nation's need for railroad transportation is also heading rapidly upward. How this booming traffic will be divided among the various forms of transport depends largely on the basic tool of railroading—the freight car.

PRR's Symes: Car shortage ahead? p.30

Today's most vital railroad problem is that of raising money to improve and expand rolling stock. Here, in another up-to-the-minute Railway Age "Story at the Source," is what James M. Symes, president of the Pennsylvania, says about the car-leasing plan, aimed at solving the tight money dilemma, which he recently put before the House Interstate & Foreign Commerce Committee.

M&StL speeds car replacements p.34

The freight car fleet of the Minneapolis & St. Louis can be kept at full strength with a minimum of additional outlay as the result of a plan soon to go into effect between the road and Pullman-Standard. Under the plan, when a car is destroyed, the M&StL will order as a replacement a standardized car from the P-S line. The order will be tacked on the end of the current P-S production schedule, which means the company will "simply make one more car that day."

New 'bi-level' passenger cars ordered by C&NW p.58

"Setting the pattern for passenger trains of the future" is what North Western President Fitzpatrick says about the 13 new-type cars his road has just ordered from Pullman-Standard. The cars —similar in basic arrangement to suburban gallery cars but fitted out for through main line service—will cost $2.5 million.

The Action Page—Is Ivan smarter than Uncle Sam? p.64

The evidence is that, in the vital area of transportation, the USSR is making a lot wiser and more effective use of its resources than the USA is. The difference, if not corrected, could be fatal to our country. In another war, America would need more railroad capacity than even in World War II, but nothing whatever is being done to permit the railways to increase their capacity.

Short and Significant

Rate war on Labrador ore . . .

has been ended by the ICC with a decision which permits cut on New York Central-Canadian National route from St. Lawrence river port of Contrecoeur to Youngstown area. The cut, designed

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Week at a Glance CONT.

Current Statistics

Operating revenues, eight months	
1957	$7,036,382,711
1956	6,950,408,794
Operating expenses, eight months	
1957	$5,507,215,070
1956	5,370,373,130
Taxes, eight months	
1957	$735,814,136
1956	731,061,595
Net railway operating income eight months	
1957	$615,229,126
1956	677,039,317
Net income estimated, eight months	
1957	$474,000,000
1956	534,000,000
Average price 20 railroad stocks	
October 29, 1957	72.15
October 30, 1956	97.84
Carloadings revenue freight	
Forty-two weeks, 1957	29,352,190
Forty-two weeks, 1956	30,647,271
Average daily freight car surplus	
Wk. ended Oct. 26, 1957	12,163
Wk. ended Oct. 27, 1956	3,379
Average daily freight car shortage	
Wk. ended Oct. 26, 1957	912
Wk. ended Oct. 27, 1956	13,916
Freight cars on order	
October 1, 1957	71,981
October 1, 1956	122,421
Freight cars delivered	
Nine months, 1957	76,344
Nine months, 1956	47,341

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to permit NYC "fair opportunity to compete for the traffic," will amount to 28 cents per gross ton. Rejected by the commission were like cuts proposed by roads handling Labrador ore from ports of Philadelphia and Baltimore to Youngstown area.

The National of Mexico will lease 'Aerotrain' . . .

for six months to study the "possibility of acquiring similar equipment," reports NdeM General Manager Amoros. The General Motors train will operate experimentally on Mexico City-Vera Cruz; Chihuahua-Ciudad Juarez and Monterrey-Laredo lines.

Santa Fe strike vote 'overwhelming' . . .

Members of the road's non-operating unions voted "overwhelmingly" in favor of a strike in the current union-shop dispute, according to G. E. Leighty, chairman of the non-ops' negotiating committee. No figures on the vote were released.

Two converts to piggyback . . .

are reported to be Associated Transport and Roadway Express, second and fourth largest motor carriers. Both have signed contracts with the Pennsylvania. Associated Transport's haul probably would be between New York and Cincinnati.

The Rock Island's lightweight 'Talgo' . . .

is now a 500-seat suburban train making three round-trips daily between Chicago and Joliet, Ill., and one between Chicago and Blue Island, Ill. To prepare the train for commuter service the road removed dining facilities, built a card room into the old galley space and installed machines for dispensing cigarettes, candy, cold drinks and coffee. The RI also added a three-car unit from the ACF prototype, at a cost of $110,000, to bring seating capacity up to 500.

Airlines await CAB action . . .

"The future of the domestic airlines may well depend upon the amount of fare relief granted by the Civil Aeronautics Board in its General Passenger Fare Investigation," says United Air Lines President W. A. Patterson. "Almost all businesses, including those regulated such as ours, have advanced prices constantly in the postwar years, yet we are expected to meet 1957 costs with 1940 fare levels."

Short flat cars for TTX?

The idea is being considered. Next month may see an order by Trailer Train for some 200 flat cars designed to carry one 45-foot trailer. Growing trailer length has prompted the move; two 45-footers won't fit on present long cars.

Evenly divided . . .

were some 300 Minneapolis & St. Louis employees who replied to a poll asking their feeling toward the "Symes Plan" for government freight-car buying. The question was raised by M&StL's employee paper.

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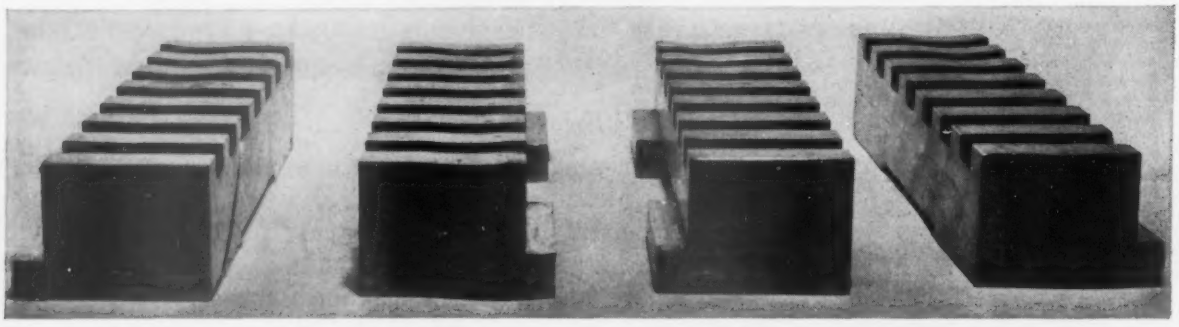

Records prove you get the best possible bearing performance for lowest investment and maintenance with R-S Journal Stops and low-cost Solid Bearings

LAST March 20th all bearings on both ends of SL-SF #96082 were removed for inspection after over 5 years of continuous service. This was the original test car equipped with R-S Journal Stops. One end had been equipped with Stops on December, 1951; the other had no Stops . . . but was identical in every other respect.

All four bearings on the Journal Stop end showed only slight end wear and perfect bearing area on the lining surfaces, and were *reapplied* for further service! As of March 21, 1957, these bearings had been in service for *63 months*, with approximately 155,000 miles of travel. All bearings from the end not equipped with Stops showed normal wear after only 11 months and had to be replaced. The Magnus solid journal bearings and R-S Journal Stops from the original test car are shown in the unretouched photos above.

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RAILWAY AGE
The Industry's Newsweekly

'Why Not Subsidy for Railroads?'

Tax funds pay deficits for other forms of transport, NARUC meeting is told, so why not apply the same reasoning to railroads, especially the commuter lines.

A new suggestion for subsidy to help railroads over their passenger-service problems was brought before the National Association of Railroad and Utilities Commissioners last week in Memphis, Tenn.

"If public funds can be used to subsidize airplanes, airports, waterways, highways and public-owned rapid transit companies, which nearly all have deficits paid from taxes," New Hampshire Public Utilities Commission Chairman Harold K. Davison asked, "why should not public funds be available to aid the railroads, especially on commuter lines?"

Mr. Davison also suggested that the Post Office Department "should keep mail on the railroad wherever possible . . . and return much which it has diverted to trucks and airplanes. Parcel post rates should be increased to protect railroad express rates and also reduce postal losses. States and localities can relieve railroads of some taxes and other assessments."

"Labor should permit its contracts to be improved," he said. "Full crew demands should be modified . . . opposition to clearly justified curtailments should stop. Wages should be more reasonably related to hours of service actually performed. Labor should recognize it is in partnership with management and not in opposition to it."

Railroads, at the same time, "must do more research, continue to mechanize, improve employee and public relations, alter union rules and, in general, keep up with their competitors. Railroads must tell their story better and more clearly. They must make every effort to serve better."

Rapping the Interstate Commerce Commission's passenger deficit probe, an NARUC committee commented that the group has been "thoroughly disillusioned as to any benefits which will be obtained from the current investigation." Procedural difficulties, the committee indicated, are to blame for much of the "disenchantment."

The group, headed by Walter R. McDonald of Georgia, recommended, however, that it be continued in existence to assist in "every way possible in attempting to derive some genuine benefit" from the studies and to "advance and protect the interests of the state commissions in this important field of regulation."

Greater net income for railroads "must be provided in some way," the convention was told by Joseph J. Brown, chairman of the Nebraska State Railway Commission. "I do not know the answer," he continued, "but the answer must be found if this country is not to suffer serious injury."

"Credit of the railroads varies from company to company," he said. "However, the public is dependent upon all railroads, not simply the strongest. It is reasonably clear that very few railroads could raise additional funds by equity financing. Even aside from any question as to the desirability of heavy borrowing by the railroads to maintain and improve their properties, I am considerably disturbed by the question as to how long railroads can borrow money at an interest rate of more than 4% when upon their net investment they are permitted or are able to earn—according to who makes the statement—only about

REA Terminal Features 'Moving Sidewalk' Conveyor

The new Railway Express Agency terminal at Hoboken, N.J., recently modernized and expanded at a cost of $700,000, will handle more than 600,000 separate pieces of rail and air express a month. Among the features of the terminal (Railway Age, Oct. 28, p. 7), are a "moving sidewalk" conveyor and three hydraulic elevator bridges between platforms which carry rail cars in and out of the facility, and, when raised, permit movement of shipments on terminal trucks between all platform areas. Shown cutting the dedication ribbon is (second from right), A. L. Hammell, REA president. Flanking him, left to right, are: A. E. Kriesien, assistant vice-president and general manager of the Erie; Daniel F. Carmody, acting mayor of Hoboken: and W. G. White, vice-president—operations, DL&W.

3.34%. Clearly, railroads cannot look to depreciation even to maintain their properties in existing conditions. . .

"When a railroad freight car is worn out in public service, it must be replaced if the railroad is to continue to give even the amount of service it has given in the past, let alone giving a greater and improved service to meet the needs of a growing country. But the cost of a new car is far greater than the cost of the old car, and the accrued depreciation will not even begin to pay for a new car as depreciation once contemplated.

"Even making some allowance for the fact that new cars are better than the old, the fact remains that depreciation should be treated as an operating expense. In effect, railroads are being required to invest new capital to pay a portion of their operating expenses. This certainly is an unsound condition. It does not exist, at least to any appreciable extent, with any other agency of transportation; and it is entirely beyond the control of the railroads."

Mr. Brown disclaimed the role of "champion of the railroads" and added that "I do not think that the great work the railroads did in building up the country during the first 100 years of their existence entitles them to support not merited to present conditions, but the country still is highly dependent on them."

"Looking at the situation in coldest neutrality," he continued, "neither the general public, shippers, the armed services, nor even the competing agencies of transportation can view with complacency any injury to the railroads which would impair their ability to render adequate and efficient service, or make government intervention of some sort necessary."

"Naturally," the Nebraska commission chairman conceded, "everyone using railroad freight service desires the 'lowest possible lawful rates'; but over and above that there is the primary necessity for good service, and this means a constant flow of new capital into the railroad plant."

Watching Washington *with Walter Taft*

• **TAILORED APPLIANCE RULES FOR TRACK CARS** will be the ICC's proposed answer to the United States Supreme Court's ruling that a track motor car and push truck coupled together are vehicles covered by the Safety Appliance Acts. The court's ruling (Railway Age, May 27, p.14) was in a case which grew out of an accident on the Baltimore & Ohio. It rejected railroad contentions that track cars are wholly exempt from the Appliance Acts.

• **THE COMMISSION'S PROPOSAL** will be submitted to Congress as a legislative recommendation of its next annual report. It will suggest that the Appliance Acts be amended to exempt four-wheel track motor cars and four-wheel push trucks, and to authorize the commission to prescribe for those cars and trucks such appliances and devices as may be necessary in the interest of safety.

• **IMPRACTICAL REQUIREMENTS** could result from extension to track cars of the present rules designed to cover freight-train and passenger-train cars and locomotives, the commission believes. In that connection it is understood to have in mind specifications calling for such appliances as hand holds and sill steps.

• **NEW LOOK IN AAR PUBLIC RELATIONS** may take shape by the first of the year. While no final action with respect to the long-pending changes was taken at the October 25 meeting of the association's board of directors, it is now expected that some announcement will be made this month—perhaps about the time of the member-road meeting scheduled for the 22nd in Chicago.

• **ANOTHER $300 MILLION** was added to the annual wage bill of the railroads on November 1. The addition resulted from a 7-cents-per-hour increase effective that day under current agreements and an escalator-clause raise of 5 cents per hour. The latter came with publication of the Bureau of Labor Statistics' cost-of-living index for September 15. At 121.1, the index was up 2.2 points from the figure for March 15, on which the May 1 increase of 3 cents was based. The escalator clauses call for increases of one cent per hour for each half-point rise in the index.

• **STRATEGY MEETING** will be held in Washington November 7 by the Executive Committee of the National Conference for Repeal of Transportation Taxes. Conference members include representatives of shippers, carriers of all types, and other interested parties. Among new conference plans for continuing its repeal drive is one contemplating economic studies of the tax's impact on the public and the government. Such studies would be the assignment of a proposed research committee.

Improperly Placed Track Material Caused Accident

The June 18 accident on the Santa Fe near Acomita, N. Mex., resulted from the train striking tieplates which had been placed between the rails to await installation.

The ICC's report, No. 3759 by Commissioner Tuggle, put it this way: "The accident was caused by a separation in a train and damaged brake equipment on the rear portion of the train as a result of improperly placed track material." The accident was a collision between the front and rear portions of the train which was No. 21, the westbound "El Capitan." Sixty-six passengers and four dining car employees were injured.

The train consisted of a four-unit diesel-electric locomotive and 12 cars, including nine of the "high-level" type. The separation occurred between the eighth and ninth cars which were of that type.

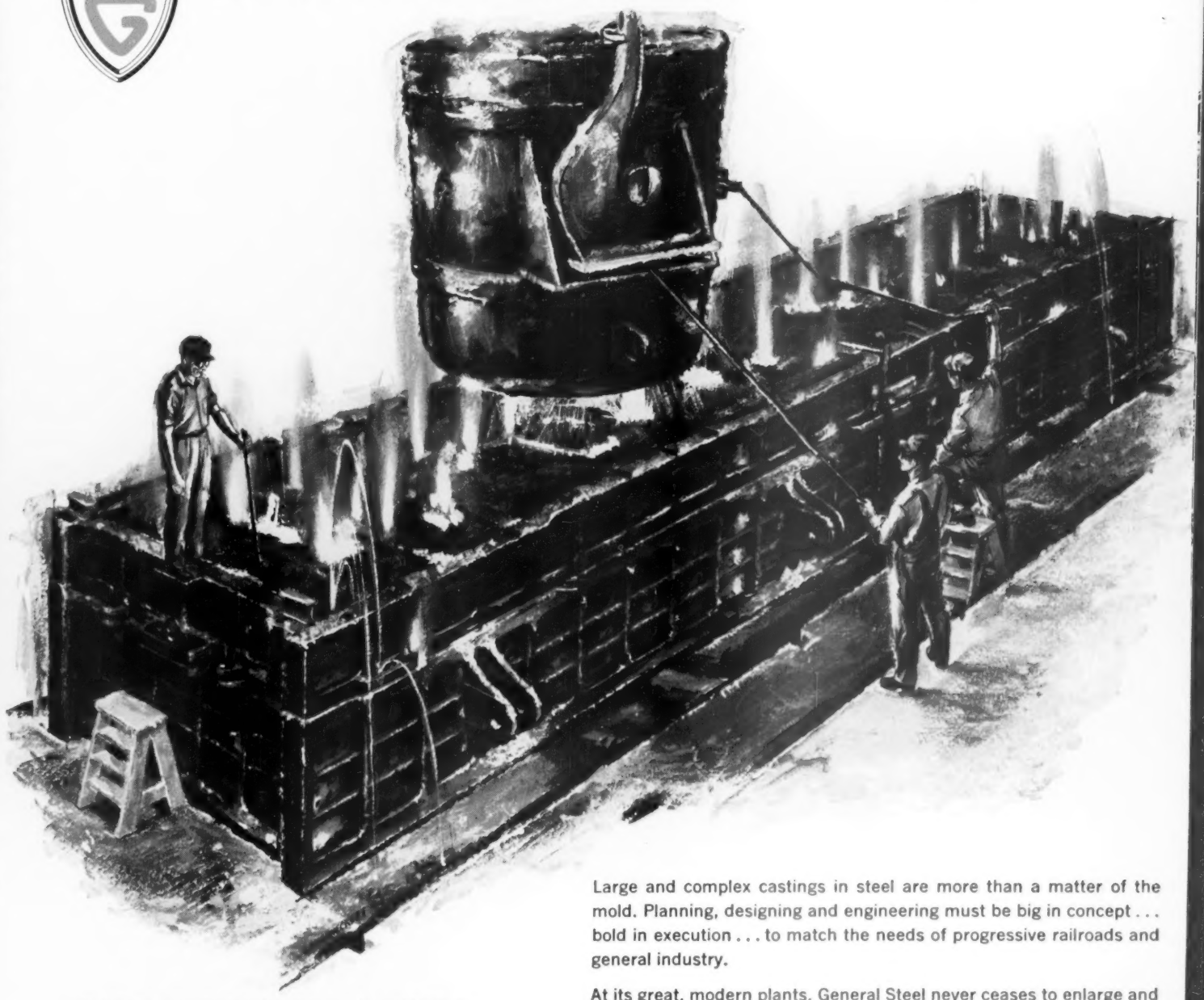
The brake equipment of the four separated cars was damaged to the extent that their braking power "was reduced to 50% of normal, thereby reducing the rate of deceleration of these cars as compared with the forward portion of the train," the commission said in explaining the collision.

As to the "improperly placed track material," the commission reported that, on the day of the accident, trackmen engaged in rail-renewal work had placed 616 tie plates between the rails of the track on which the accident occurred. The foreman was engaged elsewhere at the time, but a track supervisor subsequently questioned him about the position of the plates.

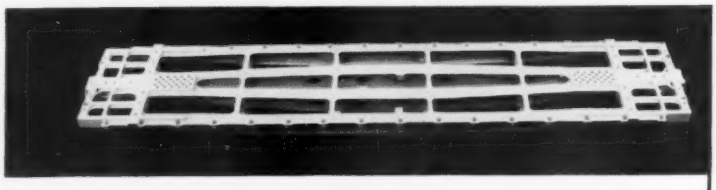
Because of a "misunderstanding," the foreman got the impression that the supervisor was talking about some other plates which had been placed between the tracks of the double-track line involved; and the supervisor got the impression that the trackmen had been authorized to leave the plates between the rails. Members of the "El Capitan" crew told commission investigators that the train's brakes became applied in emergency "several seconds" after

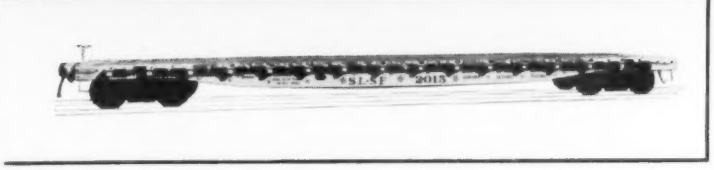
(Continued on page 58)

Where railroad progress is cast in steel.....



Molten steel cascades from ladle into massive mold to form a Commonwealth one-piece freight car underframe.





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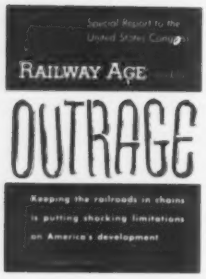


More Comments About 'Special Report'

"Concentrate"

NEW HAVEN, CONN.

TO THE EDITOR:

You have put together a very complete and orderly presentation of the railroad position, and I commend you for it. Any follow up of this approach should concentrate on two main features: one, that railroads are regulated as a monopoly, whereas they are no longer in that category; two, such regulation so distorts the distribution of the nation's traffic to the efficient, economic carrier, that the country is paying more for its transportation than it should.

F. J. ORNER
General Superintendent of Transportation
New York, New Haven & Hartford

Reaches Beyond Railroads

RICHMOND HILL, N. .Y

TO THE EDITOR:

Congratulations on the content and arrangement and readability of the special report. I think you have done an excellent job, and may it continue. You are releasing this information not especially among railroad men who know what the situation is anyway, but among governmental officials, members of regulatory bodies and the public in general, who are the ones it is most important to have conscious of the true state of affairs.

P. H. HATCH
General Mechanical Superintendent
Long Island

Go to Community Groups

HOBOKEN, N. J.

TO THE EDITOR:

I enjoyed immensely the special report in the October 7 Railway Age.

My personal view is that there is some danger as to the acceptance of such publicity if it tends to dwell too much on any qualities without at the same time telling what the railroad industry is actually doing to help itself. I think that you have provided a good balance in this connection, and would suggest also that it may be a good idea to get this report into the hands of the chairmen of the various railroad community committee groups, etc., throughout the United States, and continue to follow up with additional material as it becomes available. A good deal of this information could be used by the speakers who work out of Speakers Bureaus of the various community committee groups.

J. A. CRADDOCK
Superintendent
Delaware, Lackawanna & Western
President, American Association of Railroad Superintendents

Reprints will, we understand, shortly be in the hands of the community committees.—EDITOR

Needs Six

ROANOKE, VA.

TO THE EDITOR:

Congratulations on your special "Outrage" report to Congress. It's tops! Wonder if you'd kindly let me have six additional copies. I have a special use for them.

H. T. FREED
Managing Editor
Norfolk & Western Magazine

"Outstanding"

BALTIMORE

TO THE EDITOR:

I have just finished reading the October 7 Railway Age. It certainly is one of the most outstanding issues ever published. The manner in which the case of the U. S. railroads is presented makes it impossible for anyone to disregard the fact that the carriers are not being treated fairly by the federal as well as state governments.

E. H. RIECKS
General Passenger Agent
Baltimore & Ohio

"Brief Case Material"

RALEIGH, N. C.

TO THE EDITOR:

The presentation represents the most excellent approach generally I have ever seen to this most important of railroad problems. It is indeed good brief case material for those who are in daily contact with the shipping public.

E. H. DURHAM
General Agent
Atlanta Coast Line

"Much Good Will Come"

PHILADELPHIA

TO THE EDITOR:

It was certainly gratifying to read the strong, straight-from-the-shoulder report to the public and Congress revealing the true situation affecting the railroad industry. I am sure that much good will come from this type of expression of the facts to invigorate thought and action in the minds of the American public.

J. BENTON JONES
Vice-President, Passenger Sales and Services
Pennsylvania

"Do Another One"

CHICAGO

TO THE EDITOR:

The "Outrage" issue is the most complete, convincing, effective, and understandable statement of the "railroad problem," and what to do about it, that has come to my attention during many years of contact with the legislative aspects of railroad work. I am glad this report will be given wide distribution, and certainly shall do my part to this end.

I hope you will continue this effort to get the facts before the public, and those who make and administer our laws. Specifically, I would like to see you come forth with another "Outrage" issue, repeating the story in different but equally dramatic terms, which would be sent to members of Congress shortly after the next session convenes.

ELDON MARTIN
Vice-President & General Counsel
Burlington Lines

Gratifying Distribution

NEW YORK

TO THE EDITOR:

This is the best presentation of the subject I have yet seen. It is set up in such a way that it is easily read, and the photographs and charts attract the eye. It is particularly gratifying to know of the distribution for it is certainly too important to confine to the railroad fraternity.

P. K. PARTEE
General Manager, New York Terminal Region
Baltimore & Ohio

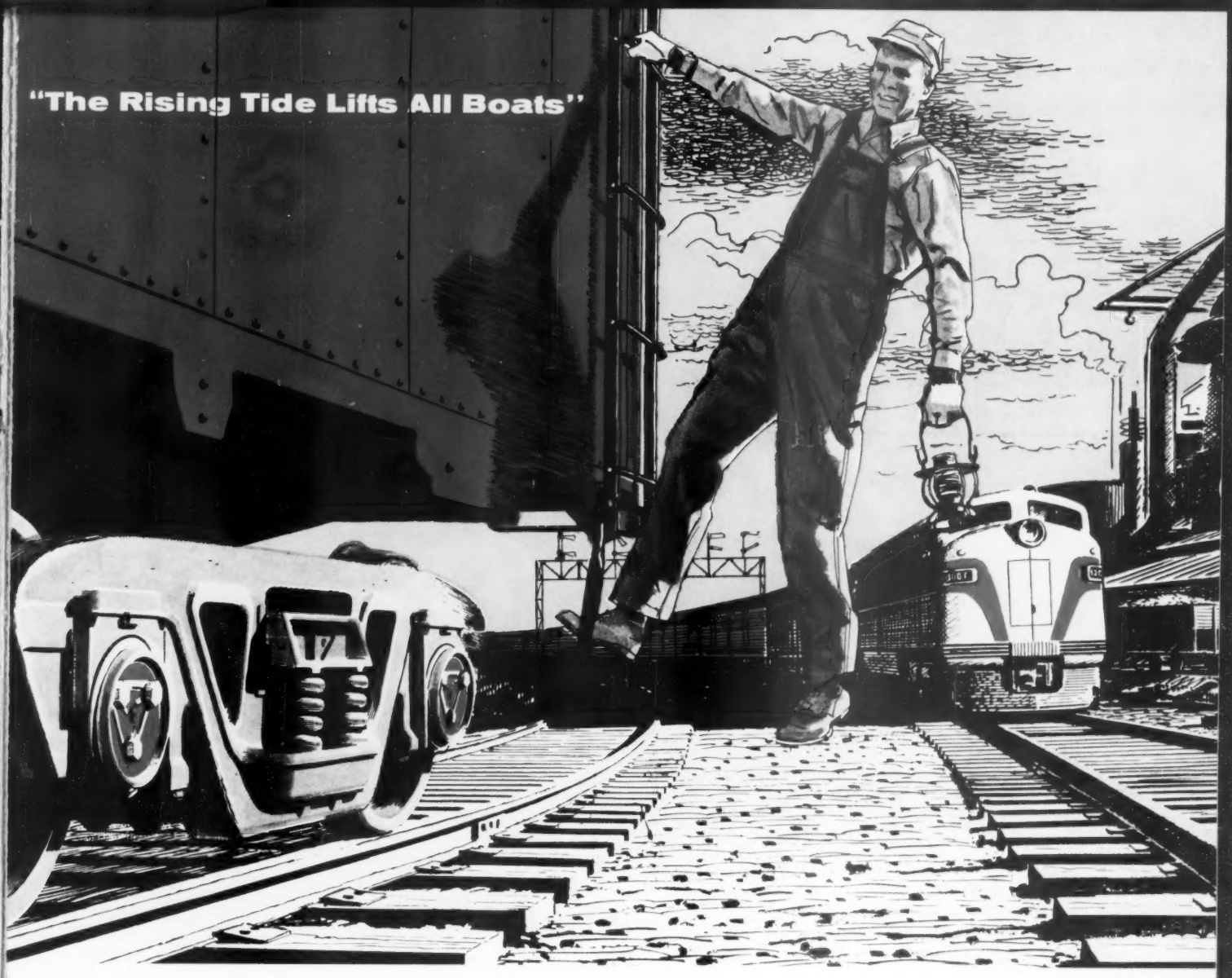
"Like to Distribute"

EAST ST. LOUIS, ILL.

TO THE EDITOR:

The Special Report is one of the finest articles of its kind I have ever read. I would like to distribute copies to some members of our city and state government offices, and am wondering whether it would be possible to obtain about fifty copies of it.

A. L. LENNY
General Manager
Alton & Southern



...and every roller bearing freight car strengthens all America's railroads!

"*Railroads Must Modernize Before They Can Roll Up Bigger Profits*" is one of the key points emphasized by BUSINESS WEEK in its Special Report on the Railroads (issue of July 13, 1957). The comprehensive article adds, "One of the most obvious ways of improving freight cars is to equip them with roller bearings." On June 24, 1957, RAILWAY AGE said, "The hotbox problem becomes constantly more acute . . . today it probably presents the greatest single deterrent to orderly and dependable freight train operation."

We submit that no problem facing rail policy-makers today is more pressing than the need to modernize the railroads' "Achilles' heel"—*the bearings on which the revenue rolls*. There is no longer any doubt that the *one sure* answer to the hotbox—and to the excessive burden of friction, bearing maintenance, lubrication and inspection—is roller bearings. Millions of car miles in the roughest kind of service have proved it. The only question today is whether the capital investment in roller bearings is justified by their long-haul benefits.

It seems to us at HYATT the answer is already clear. If it is good business to invest millions in new signals, yards and improved roadbeds, then surely it is good business to invest in something equally vital to better service. *For all the other investments are fruitless every time just one obsolete bearing fails and delays an entire train.*

Bearings that were good enough in diamond-stack days simply *aren't* good enough in these days of higher speeds and longer runs. The problems they pose are becoming too acute to live with. Years ago, when the same was true of link-and-pin couplers and hand brakes, America's railroads teamed together to lick those problems. Isn't it time for a "rising tide" of teamwork to lick *this* one?

1,527 Fruit Growers Express and associated lines refrigerator cars equipped with HYATT Hy-Rolls have covered more than 80 million car miles without a bearing failure of any kind.

Without

25 Erie Railroad 70-ton Piggy-Back cars, averaging a tough 200 miles per day, have rolled up a record of over 4 million car miles at high speed without a hotbox on HYATT Hy-Rolls.

100 Chesapeake & Ohio 50-ton pulpwood cars equipped with HYATT Hy-Rolls have gone almost 4 million miles, entirely free from bearing delays.

HYATT

Another GM GENERAL MOTORS contribution to railroad progress . .

2,402 modern cars "HY-ROLL"

150 million car miles

...out a single hotbox!

500 Railway Express Agency 50-ton express refrigerator cars with HYATT Hy-Roll Bearings have traveled more than 48 million car miles without a single hotbox or bearing delay.

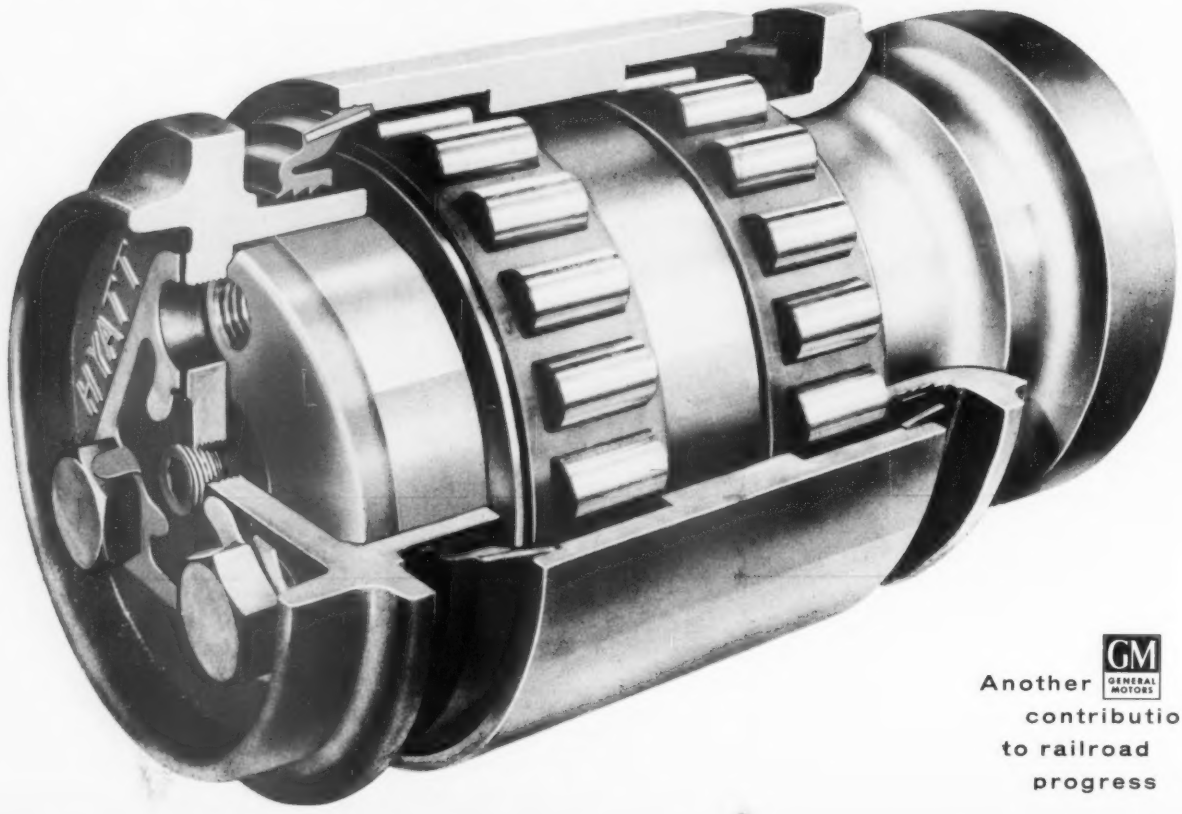
250 Louisville & Nashville 90-ton ore cars on the Mobile-Birmingham run have amassed over 14 million troublefree car miles on HYATT Hy-Rolls.

...ress . . . over 13,000 car sets now on order or in service on 40 leading lines

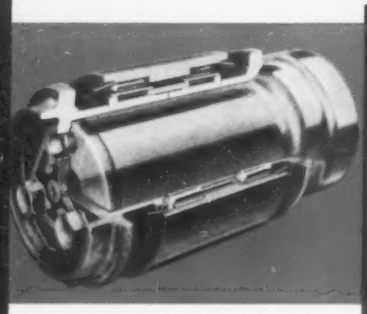
HY-ROLL BEARINGS

FOR MODERN LOW-COST, NON-STOP FREIGHT

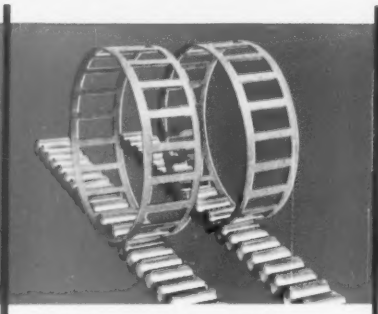
4 KEY REASONS WHY HY-ROLLS ARE SO DEPENDABLE, ECONOMICAL



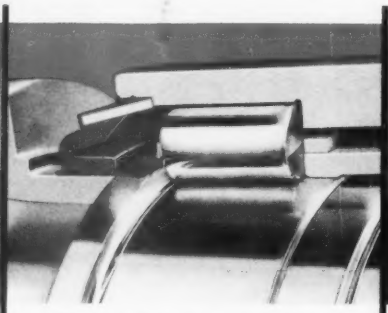
Another GM GENERAL MOTORS contribution to railroad progress



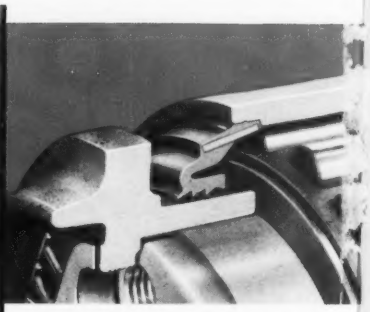
1 Simplified design and quality features like high-nickel steel races assure lower installation and maintenance costs.



2 Large straight cylindrical rollers provide maximum load capacity and life; parts interchangeable, no fitting adjustments.



3 Lateral thrusts are easily and efficiently absorbed by generously designed race flanges against which the rollers locate.



4 Positive-type seals at both ends of housing retain 3-year grease supply, completely exclude dirt, water and foreign matter.

HYATT has built over *two-thirds* of all roller bearings used on diesel locomotives, and every single one has high-capacity *straight cylindrical rollers*. The same time-tested principle is employed in HYATT Hy-Rolls for freight cars—refined and simplified for minimum installation and maintenance costs in interchange service. Hyatt Bearings Division, General Motors Corporation, Harrison, N.J.

A FREIGHT CAR IS ONLY AS MODERN AS ITS BEARINGS

HYATT HY-ROLL BEARINGS
FOR NON-STOP FREIGHT

Rail-end buildup

FABRICATION MAINTENANCE REPAIR...

Linde serves the nation's railroads

Through the years, LINDE Representatives and railroad men have worked together as a team to improve methods of road maintenance, equipment repair, and shop fabrication. And this teamwork has paid off. For today—in yards, shops, and along the right of way—LINDE's modern metalworking processes are helping railroads maintain efficiency and modernize for the future . . . at minimum cost.

Whatever your fabrication, repair, or maintenance needs may be, LINDE's unmatched engineering facilities and dependable apparatus will meet them exactly. Get complete details on modern electric welding, oxy-acetylene welding and cutting, flame-hardening, and continuous rail welding. Call your nearby LINDE Representative today!

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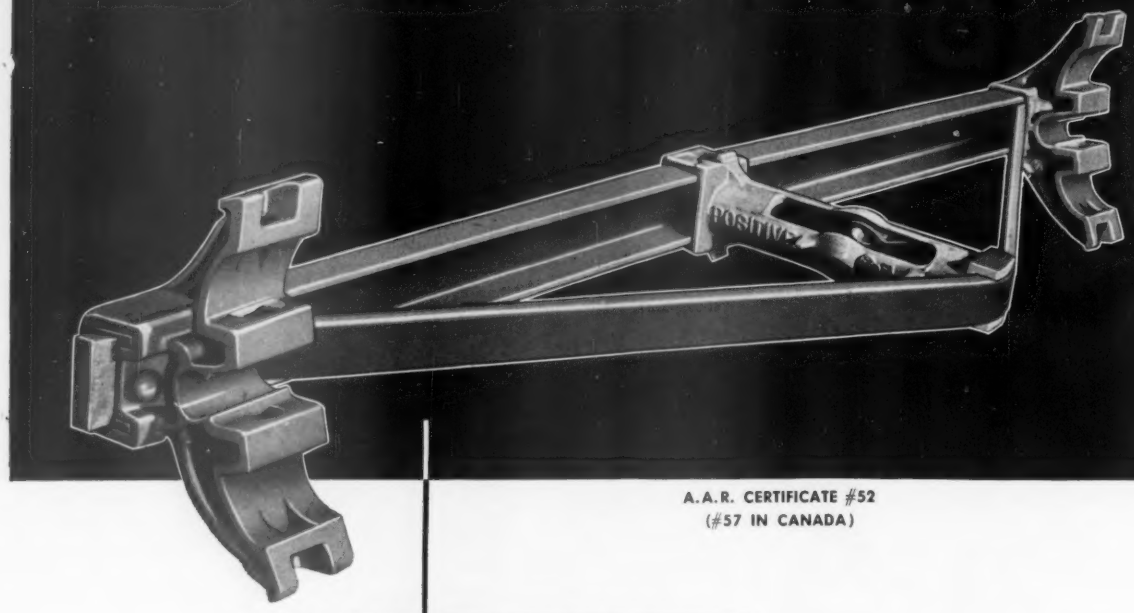
WHY ARE MORE POSITIVE BRAKE BEAMS SOLD THAN ANY OTHERS?



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(#57 IN CANADA)

BECAUSE MAINTENANCE MEN approve the fact that *all Positive Brake Beam parts are renewable;* it cuts repair *time* and trouble!

BECAUSE ENGINEERS approve the Positive Brake Beam's *more efficient design!*

BECAUSE PURCHASING AGENTS approve the Positive Brake Beam's less frequent replacement; it cuts repair *cost!*

BECAUSE OPERATING MEN approve the Positive Brake Beam's more reliable, *dependable performance!*

CHICAGO RAILWAY EQUIPMENT CO.

C-4 332 SOUTH MICHIGAN AVENUE CHICAGO 4, ILLINOIS

The Freight Car: Key to the Future

By a good many predictions, American railroads are facing a period of great opportunity — if they're prepared. Time and again, forecasters have demonstrated that because U. S. population is headed rapidly upward, the nation's need for transportation of the type railroads provide is heading rapidly upward too.

No one can tell with precision, of course, how this booming traffic will be divided among the various carriers that make up the nation's transportation system. But however the percentages fall, one fact is clear: Much will depend on that basic tool of railroading, the freight car.

A decade hence, the freight car of today may well have gone the way of the arch-bar truck. In function, capacity and contents, it could be a different vehicle altogether.

What will tomorrow's freight car look like? How big will it be? What will it be designed to haul? Will present trends toward specialized equipment continue, or will the car of the future be a general-purpose, mass-production hauler? And—perhaps the most knotty question of all—how many cars will be required to handle the job railroads will be called upon to perform?

It's no surprise, considering the variables and unpredictables involved, that railroad men differ on the answers.

Nevertheless, the job of forecasting future car requirements apparently can be done:

- At least one Class I road has prepared a 10-year study of freight car needs which winds up with purchase recommendations through 1967.
- Another major carrier, while not going that far, has at least outlined its hopper car needs as it sees them for the years ahead.
- Major car builders, with an eye both to future business and to leveling out traditional peaks and valleys in car ordering, are hot on the trail of authentic answers, too.

A Look Ahead at 1965's Traffic

One fairly recent forecast, Railway Progress Institute's "Ten-Year Projection of Railroad Growth Potential," predicts that by 1965 railroads will be hauling 880 billion ton-miles of freight annually—a 41% increase over 1955. They will have increased to 50% from 48% their share of total intercity traffic volume.

To handle this business, the RPI believes that railroads will need in 1965 a fleet of 1,879,000 cars—which amounts to 179,000 new cars in addition to those built to replace obsolete equipment between now and 1965.

Customer Must Benefit

The RPI study, it should be noted, contemplates an increase of only 10% in the car fleet to handle an expected 41% boost in ton-miles—which, if true, means that freight-car utilization will be a bigger topic in the future than it is today. And, as usual, not all railroaders agree on the size and shape of the problem ahead.

For instance, Railway Age has received these comments:

- From an eastern road, referring to the RPI's citation of the "inherent superiority" of railroads in terms of capacity and economy: "Until some way is found to translate inherent advantages into benefits which a customer can recognize in the market place, they will have no more value than a light under a bushel."
- From a major western carrier: The RPI study "should be helpful . . . as a guide, in setting up predictions of equipment needs. The growing demand for special type equipment and the consequent reduction in the utilization of freight cars for general-purpose loading is but one of the factors which make it difficult to translate equipment requirements even as much as four or five years in advance into the number and type of cars which may be needed in the years to come."
- From an eastern president: "I am somewhat more optimistic as to the share of intercity transportation the railroads will handle in 1965. . . . I am especially interested in (the RPI's) conclusion that with a 41% increase in ton-mileage . . . the railroads can—through heavier loading—handle it with only a 33% increase in car-miles and a 17% increase in train-miles. By stepping up our freight car-miles per car-year, the report believes that 10% more freight cars can move the 41% increment in traffic. We . . . are striving toward greater utilization of equipment—and facilities—which I believe is the most important step toward improved earning power."
- From an officer dealing in securities for an insurance firm: The RPI's predictions "are very well founded and on the conservative side as to transportation demands—particularly in the railroad field. . . . I would take exception to its estimates for new railroad equipment, particularly freight cars, as being far too conservative."

The Job Ahead

The freight car is perhaps the key to whatever the future holds for U. S. railroads. Its better utilization is involved in almost every project railroads undertake —push-button yards, CTC, track improvements, better locomotives, freight-handling facilities and car shops, even mechanized accounting.

All play a part in enabling the railroad industry to make better use of its basic tools.

But if the economists are correct, better utilization alone won't enable the railroads to get all the traffic that will be available as tomorrow becomes today. More freight cars—better freight cars—will be needed, too. What will these cars be like? How can the railroads pay for them? ►►►

Will Shippers Be Getting the Cars

Tomorrow's freight cars are being ordered and built today. Future car shortages and future traffic trends will reflect what the railroads do now. Despite all railroad car specifications, customers who utilize these "shipping containers" ultimately specify their designs and arrangements. The evolution of tomorrow's freight cars will be based largely on four principles — principles basic to the acceptance of railroad freight service because they are of ultimate importance to the country's shippers.

Today's and tomorrow's freight cars must (1) reduce damage to ladings caused by movement, (2) cut shippers' costs of packing and stowing, (3) satisfy the **receiver**—the real boss of both the shipper and the carrier—and (4) fit in with today's assembly-line methods of distribution.

Railway Age has always fostered discussion and study of all phases of freight car design and utilization. Two years ago, two special autumn issues were devoted almost exclusively to this topic.

What is the box car situation?

Over 20,000 box cars have been ordered since January 1, 1956. These are to supplement a box car fleet which with additions and retirements hovers just under the 3/4-million mark. As many box cars were ordered in the first ten months of 1957 as were ordered during all of 1956.

What are these cars like? They are almost evenly split between 40-ft and 50-ft models. Of the 20,102 units ordered, 19,982 have a capacity of 50 tons; the remainder are rated at 70-tons. Over 900 of these cars are to be insulated.

Door openings are a perennial topic of discussion. Here is the distribution of door openings among the box cars on order:

6-ft.	2,915	14-ft.	550
8-ft.	10,530	15-ft.	3,597
9-ft.	1,475	20-ft.	10
12-ft.	300		

Doorways are larger for mechanized loading and unloading.

Tongue-and-groove lining continues the most popular type with over 60 per cent of the cars to be finished this way. Over 20 per cent will get plywood linings. The remainder will be lined with composite designs of wood and steel.

While wood remained the most popular lining material, it is already far behind in floor construction. Over 55 per cent of the cars on order will have nailable steel floors. Plain wood will be used for only 32 per cent of the cars and most of the rest will have wood decking covered with various steel plates.

Load retainers and separators are finding more and more of a place in modern railroad transportation. DF loaders will be installed on 3,373 of the box cars ordered, Compartmentizers on 195 cars, and lading strap anchors on 6,220 units.

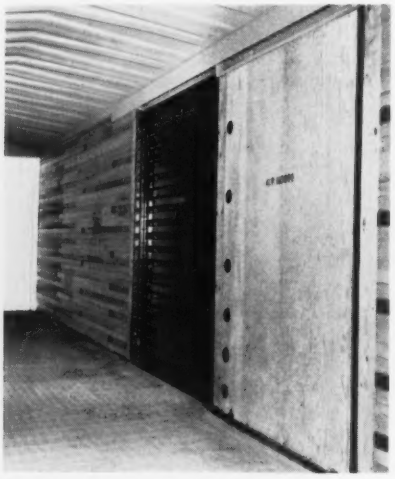
Over 12 per cent of the box cars ordered in the past two years are to be equipped with roller bearings. Friction draft gears continue the most popular with 75 per cent of the total.

Most of the remainder will get rubber draft gears although there are to be 325 installations of cushion underframes.

It is important to note that this Railway Age survey applies to cars *ordered* during the past two years. Many of them have not yet been built, and many of the cars completed during this time were ordered previously. Biggest milestones of the period have been the introduction of the plug-door design, 20-ft door openings, increasing use of steel or composite linings, and growing trend to nailable steel floors, DF loaders and roller bearings.

DF-LOADERS and insulated, plywood-lined interior are part of car. Diamond-tread steel plate is used on entire floor. DF loaders are specified for more cars.

PLYWOOD is increasingly popular material for car lining. This Great Northern car has plywood-lined roof as well as sides and ends.



PLUG-DOOR CAR interior shows use of nailable steel floor, strap anchors, UP-developed reinforced end, and roof sprayed to prevent condensation.

They Want?

They were published just prior to two of the busiest months in all railroad history for the ordering of new freight equipment.

"Freight Cars—the Key to Railway Revenue" (October 24, 1955) explored all facets of the freight car situation and placed special emphasis on an extensive survey of the cars shippers wanted, incorporating the results of nearly 300 questionaires. Then (November 14, 1955) came the report of a Railway Age roundtable which discussed "What Is the Modern Freight Car?" This brought together shippers, railway suppliers, and railroad traffic, transportation and mechanical men.

Railway Age thus provided valuable and timely information. What followed? In November 1955, the railroads ordered 51,066 cars. In December, orders were placed for 42,278 more. The year's end found a backlog of 147,743 cars—one of the largest in all carbuilding history. Now, two years later, what has happened? The backlog is not nearly so large; paying for cars is the big problem.

PLUG-DOOR box car design is recent innovation by group of Western roads to provide extra-wide opening. Youngstown Steel Door supplied these doors; UP car is one of 700 on road with Waugh cushion underframe.

What Railway Age found out about box cars two years ago . . .

The 183 firms surveyed included shippers of machinery (25); of flour, grain and sugar (25); of liquid cleaners and paints (16); of fiberboard products (11); of textiles and rubber goods (10); of groceries (6), furniture (5), beverages (5), building materials (5), tile and brick (5), paper products (5), and drugs and toilet articles (5). These shippers expressed preference for the following features:

Length: 40-ft 6-in. 37%
50-ft 6-in. **53%**
Inside height: 10-ft 6-in. .....Almost unanimous
Inside width: Only six of 183 shippers were not satisfied with present standard width.
Door opening: 6-ft **2%**
8-ft 37%
9-ft 12%
14-ft **13%**
15-ft 5%
Capacity: 50-ton capacity was by far the most popular with a few machinery shippers requesting smaller cars and no shipper any larger cars.

Insulated cars were required by approximately 30% of shippers answering, with shippers of canned goods, sugar, cleaners and paints, groceries, beverages, and toilet articles showing great interest in this special equipment.

Load retainers and separators were of interest to 38% of shippers queried. Greatest interest was shown in these devices by shippers of canned goods, groceries, toilet articles, paints, fiberboard products and furniture. Least interest was expressed by shippers of flour, sugar and grain. The shippers were almost unanimous in wanting separators of the "DF" and "Compartmentizer" types. There was little interest shown in the less elaborate strap anchors.

Floor construction showed 85% of shippers satisfied with the standard wood floor with single stringer support. Most of the remainer wanted nailable steel flooring.

Loss and Damage Claims: Most complaints about leaky cars came from shippers of flour and sugar. Approximately a quarter of these replies expressed dissatisfaction.

Claims for all types of loss and damage were found to be highest among shippers of drugs, canned goods, groceries, flour and sugar. Several shippers of canned goods reported that they filed claims on almost 100 per cent of their rail shipments. Other shipments most frequently subject to damage claims, according to this survey, are machinery and building materials.

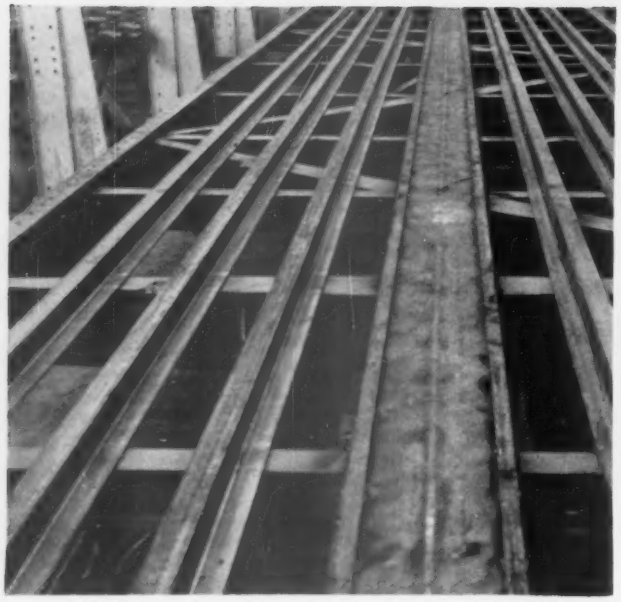
There was little attempt by shippers to fix blame for damage to their shipments on specific car conditions other than leaky roofs. Quizzed about damage from vertical oscillation, or from longitudinal shocks, shippers could not specify causes. There was most agreement in blaming excessive speed and carelessness in humping for lading damage.

THIS CAR EQUIPPED WITH
LADING STRAP ANCHORS
DO NOT NAIL IN WOOD
THIS CAR EQUIPPED WITH A
NAILABLE STEEL FLOOR
USE 20 or 30 PENNY NAILS
TO SECURE BLOCKING
BY NAILING INTO GROOVES

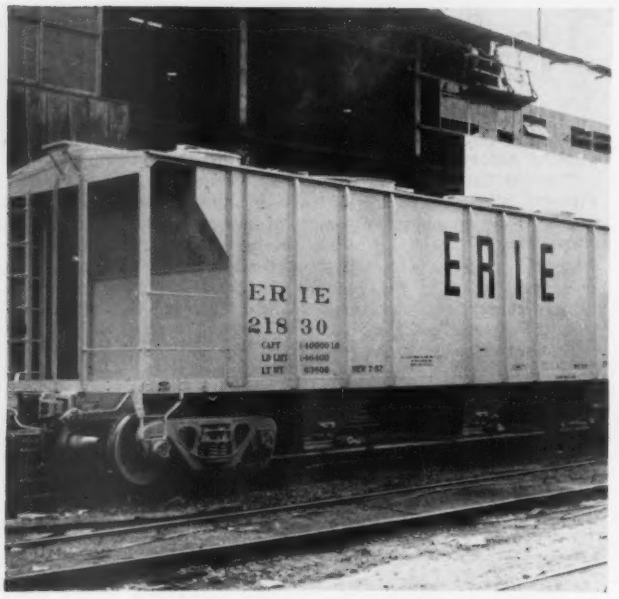
STEEL LINING in Southern "premium" car extends up 4 ft; it has integral strap anchors. Plywood is used for lining the car above the steel.

DOORWAYS can be loaded solid in this Southern Pacific car with Compartmentizers. No dunnage is needed. This car is one of fleet of insulated cars.

NAILABLE STEEL FLOORING installed in Southern box car at Pullman-Standard's Bessemer, Ala., plant. This floor is in over half of box cars ordered.



BOX CAR UNDERFRAMES all will have three stringers on each side of center sill as a result of recent AAR action. This Pennsy underframe has diagonal bracing.



CURRENT CAR-BUILDING has been marked by growing popularity of the covered hopper. This Greenville-built car has newly developed epoxy resin finish.

What is the open-top car situation?

Over 5,000 gondolas have been ordered to date this year, almost equaling the orders for all of 1956. Almost all of these cars will be 70-ton capacity and 52 ft 6 in. long. During the past two years only a few drop-bottom gondolas and just over 600 of the 65-ft 6-in. mill types have been ordered.

The nailable steel floor is finding its place in gondolas. Other roads make use of composite floors. Increasingly popular is the use of spring-loaded skids and covers for the handling of steel sheet and coils. Recently Railway Age reported the first installations of DF loaders in gondolas.

Covered hoppers continue popular with shippers. Approximately 22 per cent of the hoppers ordered in both 1956 and 1957 have been of the covered type. Airslide cars are being ordered with increasing frequency to handle all types of granular and powdered materials.

Almost all of the open-top hoppers ordered during the past two years have been 70-ton cars, in line with a recent recommendation of the American Iron & Steel Institute. The 1957 hopper orders total approximately 12,000 as compared with 23,000 in 1956 and 56,000 in 1955.

Almost 3,100 flat cars have been ordered during the past two years. Recently strap anchors have been used on almost all cars built. There have been over 700 flat cars ordered in 1957 compared with 2,500 in 1956 and 5,900 in 1955. Of the cars ordered in the past two years, 30 have been depressed center, well-type, or heavy-duty cars.

COMPARTMENTIZED P&LE gondola was developed cooperatively with steel-mill customers. Road and shippers have hailed this arrangement. Also popular are skid-equipped, covered gondolas.

COMPOSITE wood-and-steel floors are applied to gondolas built by Baltimore & Ohio at its DuBois, Pa., shop. Of cars now on order well over half are to be turned out by railroads' own shops.

DF GONDOLAS on the Chesapeake & Ohio and Union Pacific are simplifying the problems of shipping electric-furnace electrodes. It is expected these cars will rapidly find many other uses.

What Railway Age found out about gondolas two years ago . . .

The 42 firms surveyed included shippers of metal working machinery (8), iron and steel (6), iron and steel products (5), metal scrap (5), cast iron pipe (4), cranes and derricks (4), and electrical machinery (4).

These shippers expressed preference for the following features in gondolas for handling their products:

Length: 52-ft 6-in. 67%
There was some interest in 65-ft 6-in. cars shown by iron and steel product shippers and in 41-ft 6-in. cars by electrical machinery manufacturers.

Height of sides: 3-ft 6-in. 17%
4-ft 17%
4-ft 6-in. 20%
Unimportant 20%

Capacity: 50-ton capacity was the size most of these shippers specified as adequate. Shippers of metal working and electrical machinery expressed need for 70-ton cars.

Load retainers and separators were a necessary feature of cars for 20% of the shippers queried. They are most popular with shippers of cast iron pipe, iron and steel shapes, and metal working machinery. **Hold-down clips** are very popular with all gondola users.

Floor Construction:
Nailable steel floors 7%
Composite wood and steel 60%
Steel plate 21%
Wood ..... Few

Roofs were rated as of minor value to 29% of the shippers polled.

What Railway Age found out about flat cars two years ago . . .

The 43 firms polled included road-building machinery shippers (13), metal-working machinery shippers (11), agricultural implement shippers (6), and iron and steel products (5).

These shippers expressed preference for the following features in gon-flat cars needed to handle their shipments.

Length: 40-ft } . . Used by 40% of those answering
50-ft }
53-ft 6-in. . . Recommended by 70%
Width: 10-ft 6-in. . . . Almost unanimous

Bulkhead ends were most popular with shippers of metal working machinery. There was little interest in these ends among the other shippers. It was pointed out that there were few shippers of lumber and wall board in this poll and it is with these shippers that the bulkhead car has been most popular.

Hold-down clips were rated as of most value to shippers of metal working machinery and agricultural implements.

Well and depressed-center cars were required by some shippers but were not of wide popularity according to this poll.

The cars the Steel Industry wants

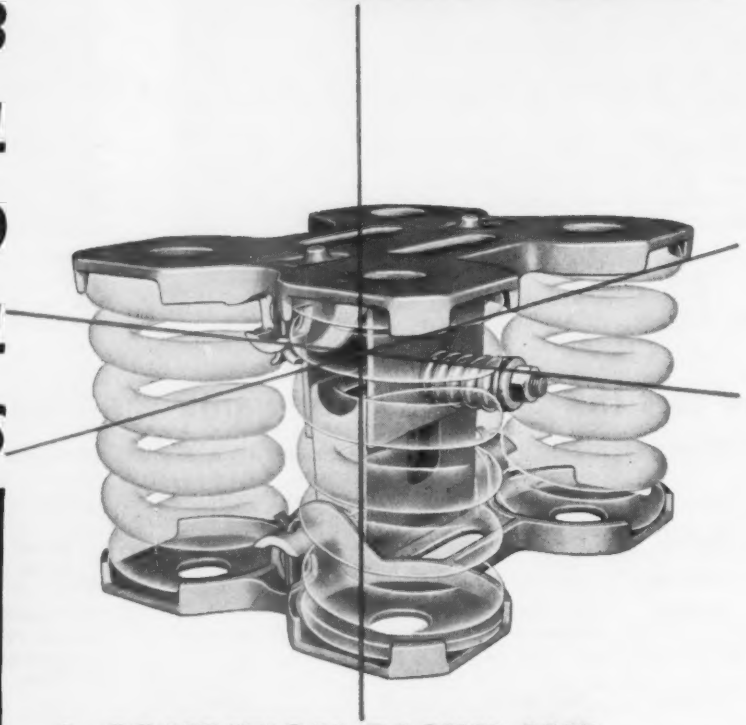
A summary of recommendations of American Iron & Steel Institute members:

	GONDOLAS	GONDOLAS & FLAT CARS	GONDOLAS WITH COVERS	FLAT CARS	BOX CARS	BOX CARS
SERVICE	General Service	Sheet steel coils with "eyes" loaded horizontal.	Sheet steel coils with "eyes" loaded vertical.	General Service	Tin plate or sheet steel.	General industrial service.
CAPACITY	Not under 70 tons	Not under 70 tons	Not under 70 tons	Standard cars: 70 tons Heavy-duty cars: 90 tons	Not under 50 tons	Not under 50 tons
LENGTH	75% should be 52'6"; 25% should be 65'6"	52'6"	52'6"	52'6"	40'6" and 50'6"	40'6" and 50'6"
WIDTH	As clearance will allow	As clearance will allow	Inside width not less than 114-in.	As clearance will allow	As clearance will allow	As clearance will allow
HEIGHT	Sides 36" to 42"	Sides need not exceed 36"	Covers for gondolas and hoods for flat cars not under 58"	Deck as low as possible	Inside height 10'. Lining need not be higher than 48"	Inside height 10'.
ENDS	Reasonable number should have drop ends.				Special reinforced ends with flush bearing at all contact points and rubber cushioning.	
FLOORS	52'6" cars: 50% wood, or composite wood and steel. 50% steel floors drilled for drainage. 65'6" cars: all with steel floors drilled for drainage. Not less than five 6"x8" wood bearing pieces bolted to floor	Wood or composite steel and wood drilled for drainage.	Two basic floating skids per car each 21' long. Skids must have cross members to adjust for various coil sizes and to adapt for car handling flat sheets or plates.	Standard cars: wood floors. Heavy - duty cars: All steel floors.	Floating loads or without DF fittings: Strong wood supported by intermediate sills with non-skid steel plate or nailable steel floor in doorway; or composite steel and wood floor.	Floating loads or without DF fittings: See previous column. For cars with fittings or bulkheads: Steel floors, nailable steel floors, or composite wood and steel floor.
DRAFT GEAR	Cushion type	Rubber cushioned or equivalent.	Rubber cushioned or equivalent.		Rubber cushioned or equivalent.	Cushion-type underframe or cushion-type draft gear.
TRUCKS	Snubbed trucks.	Improved to absorb vibration.	Improved to absorb vibration.			Snubbed trucks.

snub-up snubbers

BRING DAMAGE CLAIMS down

ABSORB VERTICAL AND LATERAL SHOCKS



THE MAJORITY OF ALL DAMAGE CLAIMS ORIGINATE IN OLDER CARS

...A CONDITION EASILY AND INEXPENSIVELY CURED AT THE FIRST SHOPPING

Reduce equipment damage and freight damage claims immediately. No reduction in truck spring capacity. Large frictional area —long life. Spring travel 1⅝" to 2½". Working parts visible for inspection. *The older the car the more it needs snub-UP cushioning.*

SHIPPERS DON'T WANT DAMAGE CLAIMS...

THEY WANT SAFE DELIVERY!

RAILWAY TRUCK CORPORATION

R-2

332 SOUTH MICHIGAN AVENUE • CHICAGO 4, ILLINOIS

Check list for a customer: to measure a supplier's ability to set the pace

The ideal "supplier-customer" relationship is one that shows promise of continuing long into the future. You should choose a supplier whose products will meet the changing conditions of your operation . . . a supplier who will create new ways to serve you.

To measure the dependability of a supplier's products in the future requires intimate knowledge of that supplier's attitude and present operational set-up that enables him to set-the-pace for new products and services.

A really responsible supplier continually strives to improve the quality of his product. His Engineering Department wants to better product design and performance. His Research and Development Department looks for new products and new uses . . . new ways to serve you better.

The only way to measure this aspect of a supplier is by studying his products and their performance under today's conditions. Look for the supplier who is on top of today's problems. For today was yesterday's future. Chances are that supplier will serve you best tomorrow, too.

STANDARD RAILWAY EQUIPMENT MANUFACTURING COMPANY

General Office: 4527 Columbia Ave., Hammond, Ind. • New York • Chicago • St. Paul • San Francisco

DEDICATED TO PROGRESS RPI MEMBER

"No weeds and brush to hide in anymore . . . they've killed 'em with Chipman chemicals!"

Chipman chemicals and application service are backed by 45 years of railroad experience. An extensive line of weed, grass and brush killers is available to meet varying conditions. Included are:

Atlacide	Chlorea	Brush Killer
Atlas "A"	Chlorax	Telvar W
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Let us solve *your* weed problems with the *right* chemicals and application service!

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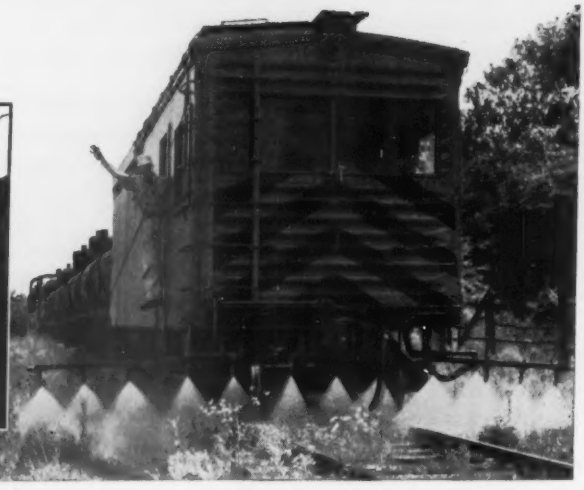


The progressive Rock Island Railroad serves Chicago's gateway to the world, Calumet Harbor. (A print of this painting suitable for framing available on request.)

STANDARDIZED FREIGHT CARS HELP LINK MID-AMERICA TO THE SEA

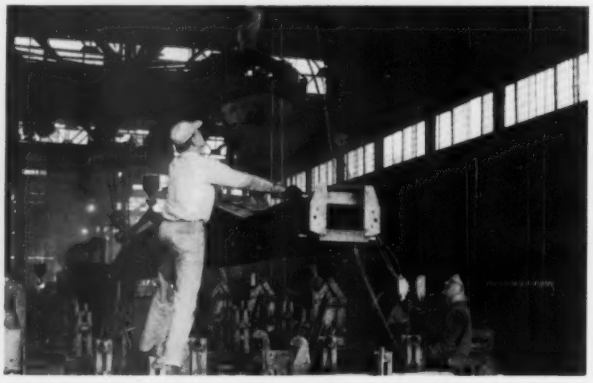
Linking Chicago's new world port to mid-continent America is another big job shouldered by the Rock Island. This includes providing the dependable, high-speed, on-time service that brings about profitable movement of incoming and outgoing cargos and lading. To maintain the highest levels of service for Mid-America shippers and consignees the Rock Island relies heavily on Pullman-Standard Standardized Freight Cars. This progressive railroad finds, as do over 100 other users throughout the Great American Railway System, that P-S engineering of standardized designs provides freight cars of unequaled dependability and low first cost. Write for brochures describing each of these P-S freight cars: PS-1 Box Car, PS-2 Covered Hopper, PS-3 Open Hopper, PS-4 Flat Car and PS-5 Gondola.

Pullman-Standard Car Manufacturing Company
221 North La Salle Street, Chicago 1, Illinois

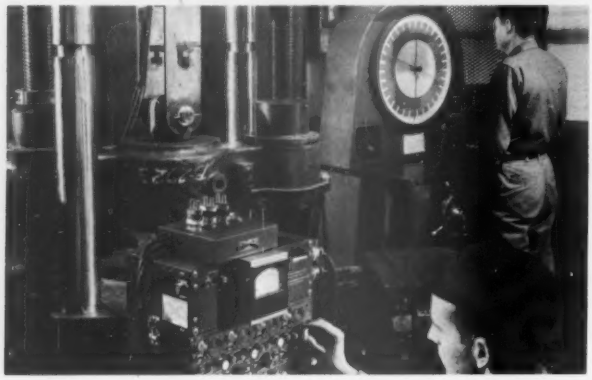
Standardized freight cars— built with the leading carbuilder's skill— proved in laboratory and in service

Automatic arc welding machines, many of patented Pullman-Standard design, allow high-speed production welding with exact control of bead and penetration. Uniform, top-quality, maximum strength units are a natural result of these advanced techniques.

Multiphase production methods concentrate the specialized skills of highly trained craftsmen on all car components. Rigid quality control and impressive first cost savings benefit P-S buyers.



P-S cars are built with precision insured by costly jigs and fixtures. Here a PS-4 Flat Car center sill is lowered into a clamping jig to provide true alignment with other weld applied underframe members.



Pullman-Standard maintains the largest Research and Development Laboratory in the industry. Advanced scientific instruments and methods provide important data that is interpreted in terms of design advances.

In-service inspection reports on P-S and other cars are regularly supplied by Field Service Engineers. Engineering evaluation of these reports suggests areas for improvement, confirms P-S strong points.

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GREAT AMERICAN RAILWAY SYSTEM

WORLD'S LARGEST MANUFACTURER OF ROLLING STOCK

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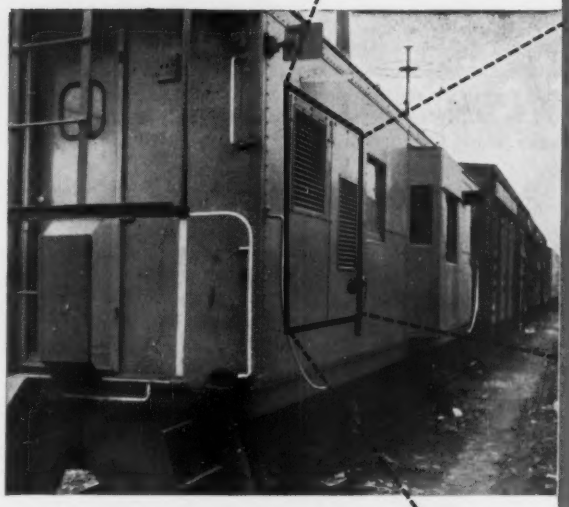
Ready and Reliable



HERE'S high availability, high-capacity power for any caboose now in service or being built.

Specially designed for rugged over-the-road service, the Model 45 caboose set features:

Reliability. Ample power constantly available for train radio, electric stove, refrigerator, as well as all interior and exterior lighting—even when standing in the yard.

Ease of Operation. Push-button starting and compact, easy-to-read control panel.

Shock Mounting. Oil-resistant neoprene mounting protects unit from road shocks and isolates crew from engine vibration.

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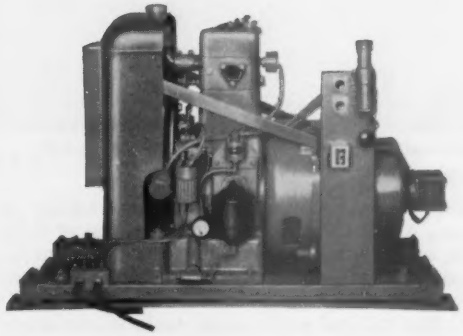
3 kw

caboose generating set



F-M Model 45 AC generating set powered by rugged, full-diesel engine—single-cylinder, four-cycle, 1800 rpm.

Efficiency . . . Availability
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TODAY'S EQUIPMENT PUZZLE . . .

Where's the Money Coming From?

Background to the story: No question in the railroad industry today is more vital than that of raising money to improve and expand rolling stock. The problem is a common talking point everywhere, and a special concern with Eastern carriers.

A few weeks ago President James M. Symes of the Pennsylvania laid before the House Interstate & Foreign Commerce Committee an Eastern plan aimed at solving the tight money dilemma. The plan proposes a government agency to acquire rolling stock for lease to the railroads.

Endorsed by 34 Eastern roads, the plan is now embodied in bills pending in Congress. In order that all railroad officers will understand what is involved, and what the plan entails, Railway Age went to the source for this discussion of the plan.

Q. Mr. Symes, your name has been associated in recent weeks with a plan which would bring the federal government into railroad equipment buying. Could you briefly describe this plan?

A. Well, I think its major points are pretty well known—a government agency would be set up with initial capital of $500 million and with authority to issue negotiable bonds up to $2 billion. Railroads needing new rolling stock could apply to that agency to purchase such equipment as the railroad specified—and which that railroad would agree to lease and use—

Q. The proposed legislation introduced in August (S. 2906 and H.R. 9597) would require ICC approval of leases, would it not?

A. No, only its approval of the railroad's need for the equipment. Applications would be filed with the commission, with a copy to the equipment agency. The ICC's role would be just to certify to the agency that the number and type of cars make sense for that railroad.

Q. What rental would a railroad pay under a lease like this?

A. Leases would be for a fixed term, of course, based on the economic life of the equipment concerned. Rentals would be fixed by the agency to cover, over the lease period, the cost of the equipment and interest, plus ¼ of 1%, for administration. The agency would retain title to the equipment but all repairs would be the responsibility of the leasing carrier.

HIGHLIGHTS OF EASTERN ROADS' PLAN

1. A new federal agency would be created to buy freight and passenger cars and locomotives. This equipment would be leased to railroads which would use and maintain it.

2. The new agency would be called the Railroad Equipment Administration.

3. The REA would have a "working fund" of $500 million. In addition, it could issue and sell, with Treasury Department approval, up to $2 billion in negotiable bonds.

4. Lease terms on rolling stock would equal the "economic life" of each type of equipment—20 years for freight cars, 15 years for locomotives, 10 years for passenger cars. REA could change these figures.

5. Upon termination of a lease period, equipment either would be sold to other government agencies for stockpiling or would be scrapped.

6. Estimated scrap value would be figured in advance and deducted from a railroad's annual rental charges.

7. Rent paid by a railroad would amortize, during the lease, the initial cost of equipment less scrap value, the estimated interest cost to REA, plus ¼ of 1% annually to cover administrative costs.

8. Railroads would assume sole responsibility for actual construction of equipment and could order specialties or accessories as desired.

9. Maintenance and repair would be a railroad responsibility in accordance with standard AAR interchange rules.

10. Applications to lease equipment would first be filed with the ICC and commission approval would be required before a railroad entered a lease agreement with REA.

"We didn't dream up this plan overnight."

Q. You speak of the "economic life" of this equipment. What do you mean by that?

A. This would be fixed from time to time by the agency. Something like 20 years for freight cars and 15 years for locomotives and maybe 10 years for passenger cars, for example, due to their rapid obsolescence—whatever the agency management set on the basis of experience.

Q. That's shorter, is it not, than the present life for depreciation purposes?

A. Yes. But we think there's need for an obsolescence factor to help keep our railroad plant modern. This would help take care of that.

Q. You'd write it off faster?

A. Generally, yes. The agency would look at a bid some railroad had from a car builder or a shop for a freight car—say it costs $10,000. It would add to that an interest rate, whatever the agency was paying in the public market plus ¼%, then it would estimate the scrap value at the end of determined life, say 20 years. The result would determine the amount of the rent, and the railroad would pay that amount in regular installments for 20 years—recovering all of the money, all of the interest, plus enough to show a small profit to the government agency.

Q. What would this agency be called?

A. Well, it has been referred to as a Railway Equipment Agency. The legislation in Congress uses "Railway Equipment Administration." The actual name isn't too important; it's what the agency would do that's important to us.

Timing Is Important

Q. I think we might well ask, at this point, just why you feel this proposition is so important, and why you brought it up at this time.

A. I want to get one point straight first. This isn"t a Symes plan, or a Pennsylvania plan. It's proposed by 34 Eastern railroads.

Now, we didn't dream up this plan overnight. It represents a lot of study and research and the Eastern roads have proposed it because we see no alternative. We're quite willing to hear proposals for improving this approach but so far none we consider valid has come along.

You ask "why now." Well, anybody who appreciates the future of this country and the tremendous growth ahead of us can't help but appreciate that railroads are going to play a big part in that growth. Everyone I've talked to agrees that railroads are going to have to spend billions of dollars for equipment, both for growth and to avoid obsolescence. Guesses range anywhere from a billion to a billion and a half every year for the next 10 years depending on whether you are talking minimum or desirable requirements. I favor the high side, myself. That's just for freight and passenger cars and locomotives.

Q. How many cars, for instance?

A. I'd say we need to order 85,000 to 100,000 new freight cars a year for each of the next 10 years just to correct obsolescence and increase our fleet.

Q. Assuming your calculations are sound, that's a lot of money. What are the possible sources for such funds?

A. I'm coming to that. That's why some plan like this is necessary if we are going to avoid severe car shortages—nationally. Look at earnings. They're entirely inadequate to help much. Look at working capital—it's disappeared. Back in 1946 our cash position was fairly strong. Class I railroads had working capital—after eliminating materials and supplies and taking into consideration debt due in one year—sufficient to meet the payroll for 4½ months. Now the industry has only a working capital sufficient to meet its payrolls for 12 days. We've already used up any fat we had.

Depreciation isn't enough to help us, and the industry can't

expect to borrow anywhere near what it has to have. Low earnings preclude equity financing. So all you have to go on is equipment financing.

Q. Those arrangements have worked in the past. Why not now?

A. Just look at the record. During the past five years, even with "easy money" part of the time, the industry could get only about $400 million a year. Add the tight money situation and the funds just aren't there in the total amounts we want. More important, they are not there for all railroads proportionately.

Not a Subsidy

Q. But not all railroads support this idea of the government coming in. Some downright oppose it. How do you reconcile their views with yours?

A. Well, a lot of people confuse this idea with subsidy, which it is not. In fact, I think it's as important for everyone to understand what this plan is not—as well as what it is. It is government assistance, that's true, and well justified in the public interest. But it's not subsidy—it can't be since it costs the government nothing. Even those cases where government assistance costs the government something, like tax deductions for the oil industry through its depletion allowances, are not called subsidy. Certainly we don't call it subsidy for those industries which are protected by tariffs. I think this distinction, between subsidy and government aid, is pretty important. If that were fully understood I think a lot of the present confusion would evaporate. This would be no hand-out and the agency would be fully self-supporting.

Q. You don't anticipate, then, any major opposition to this plan?

A. Not now, at any rate. It is unfortunate that any railroad executive would object to such an agency for other railroads—because it is purely voluntary. Why oppose something when there are others who particularly need this kind of help? In fact, I suspect some railroads that think little of this plan today will be glad to have it before long.

Q. One thing we've heard several times is that this plan would be a foot in the door to government ownership. How do you answer that?

A. I certainly disagree with such thinking. I'd say it's a necessary step to *avoid* nationalization. Government control wouldn't come this way; it would be more apt to come about if the railroads fail to provide the equipment and plant needed to handle the nation's goods. A service shortage is the big thing we have to avoid.

Q. Well, in view of this difference of opinion over this plan, who do you suppose would use the government agency if it were created?

A. Probably better than one-third of the industry. The lowest third, financially, would probably use it extensively and for a considerable period of time—until they get over the hump—but ultimately, as their credit positions improved, these roads would return to the more attractive conventional financing.

The middle third might use the agency method to some extent and at the same time do some conventional financing. Some way must be found to enable these two groups to acquire their full share of the needed total pool of equipment during the next ten years or we'll have a shortage that will make your hair curl! The top third of the industry probably will never use the agency and will continue to finance all their requirements, and do it cheaper, through conventional means.

Q. And the day would come, would it not, where the government would own the tools of trade of the poorer railroads?

"This isn't a Symes plan, or a Pennsylvania plan. It's proposed by 34 Eastern railroads."

A. That idea doesn't concern me. Even if all railroads used this plan it would be many years before the government would own even a small part of the total rolling stock.

Alternative Plans

Q. We've heard it said that an alternative plan could be developed in which railroads would arrange their own equipment financing but with the government guaranteeing the loans. What would you say to that approach?

A. I wouldn't think much of it. It would still be debt and it would still be railroad paper looking for a buyer in a limited market. Leasing equipment does not put any debt on the balance sheet and therefore does not affect your credit standing. There would be no surer way to put the railroad industry in the hands of the government than to use guaranteed borrowing, since soon all equipment financing would have to have the government guarantee. You couldn't have some equipments guaranteed and sell others without it. Soon you'd have to have the guarantee for everything and then you would be in their hands for keeps.

Q. Mr. Symes, going on with these possible alternatives to this Eastern plan, some roads say higher per diem rate with a car-ownership factor would solve the car problem. Do you think that would help?

A. It's nonsensical. I buy cars because shippers on my line need them. The urge to buy cars has to be traffic, not per diem. If you get away from the principle that each railroad should own sufficient cars to protect the peak loading on its own line—and you do have to allow for the short line roads that shouldn't own cars—you are, in my opinion, on unsound ground. And of course New England would be helpless.

Stretching the RR Dollar

Q. Let's go back for a minute, Mr. Symes, to this car buying plan and clear up a couple of points. If this thing goes through next year it's going to release some of your money for other uses. How would you spend it?

A. I wish I had more problems like that. To answer your question, though, we need this money to take advantage of technological advances outside of rolling stock. These things like electronic yards, CTC and things like that, they all are important in this business of improving our service. That's something we've got to do. Not only that, but consider that these improvements will generally show a return of anywhere from 20 to 30% on investment.

Q. The other point is standardization of equipment.

We've heard it said that this plan could lead to more standardized design, especially in basic freight cars. Yet the bills in Congress provide—well, here's the language: "the railroads to assume sole responsibility for the construction of the said equipment." Now, if that be the case, how are you going to get any more or any less standardization than now?

A. Well, there are two thoughts there. In the first place there would likely be some consolidation of small-lot orders into bigger orders in car builder plants. That would encourage some standardization. Also there would be less ups and downs in orders for equipment. By giving the builders a steady flow of orders the advantages of mass production would tend to bring about more standardization. Of course, you wouldn't get complete standardization, but I think you would see a trend in that direction.

Q. You mention consolidating car orders—do you also see this as helpful in leveling out the production job and keeping builders busy all year round?

A. Oh, yes. And I think this plan, once it gets rolling, would do a great deal of that. If we could level out our buying it would help cut car costs.

Q. Have you or anyone connected with this plan discussed it with the ICC?

A. Not that I know of—not formally.

Q. Let's go back a minute to the government's role in this plan. You don't feel that possible government interference in your operations is worth being concerned about.

A. No. This plan is really no different, in principle, from the old RFC, or, for that matter, from the leasing plan brought out a few years back by the Equitable people. They didn't interfere then; we had no trouble at all on that score. I see none here either.

Q. And you say the core of your problem is money, not the interest rate?

A. Availability is the real problem. I think these people who say money's available don't really know. No insurance company's going to say, "We're out of money." But just try to get it. It isn't around in the amount we are talking about as far as the railroad industry is concerned.

Q. On this matter of the interest rate, how important is that? Considering present income taxes, the net cost of high interest really isn't very much, is it?

"I'd say we need 85,000 to 100,000 new freight cars a year for each of the next 10 years just to correct obsolescence and increase our fleet."

A. Of course that's a factor and the net difference in cost between 6 and 7% isn't much. But I know of one road that couldn't get money even at 7%. I keep going back to the point, the money just isn't there to be had in the large amounts needed.

What Kind of Cars?

Q. What kind of cars will you buy if this plan goes through?

A. Not a great deal different from what we buy now—the same types of cars but in much greater numbers.

Q. In buying cars under this plan, you would, we assume, be free to specify any accessories or refinements you want.

A. Absolutely. Any railroad would be free to specify and would seek bids for construction the same as now. That's written into the plan. For example, if we want to put roller bearings on our cars we specify roller bearings.

Q. The same would apply to so-called specialized cars, would it not?

A. Certainly. And incidentally, I think we're going to see a lot more of these specialized cars on the railroads in the years ahead.

Q. Have you ever considered asking the shippers to buy these highly specialized cars which many of them ask for nowadays?

A. I think a lot of railroads have considered that but it doesn't work. A shipper has no incentive to buy his own cars unless you give him a rebate, and that's illegal. It just doesn't work out.

Prospects Are Good

Q. What are the chances of this plan being written into law at the next session of Congress?

A. Pretty good, I'd say. As I mentioned earlier we don't anticipate any strong opposition. Of course, we would have a stronger case if all railroads would present a united front for the good of the industry, but I feel sure congressmen are getting tired of these recurring car shortages and are apt to be pretty sympathetic to a plan that promises to end them once and for all. No one gets hurt by this plan; that helps. I think if we can defend the plan as sensible we'll have a good chance of getting it through. And I think we'll pick up more support as more people understand what we're trying to do.

Q. You are, we take it, trying to do an educational job meanwhile?

A. Naturally. The ERPC (Eastern Railroad Presidents Conference) is distributing fact sheets on the plan and a number of us have had meetings with shippers. This matter of support or opposition is a policy question. A lot of people hold back until they see which way the wind's blowing.

Q. One final point—you referred to the top third and the middle third and the bottom third of the railroads who needed this plan. Where do you put the Pennsylvania?

A. Right in the middle.

Q. Then you're not one of those who need it most?

A. We need it, as all railroads need it, so the bottom third, as you call them, and all other railroads can acquire their share of equipment—otherwise we and all other railroads will have car shortages. This is the only plan we know that will avoid industry-wide car shortages during the next ten years.

A PS-1 BOX CAR from M&StL's fleet. The road also recently took delivery on 100 PS-2 covered hoppers.

M&StL Speeds Car Replacements

The freight car fleet of the Minneapolis & St. Louis can be kept at full strength, even though cars are destroyed in accidents, with a minimum of additional outlay. This is the result of a plan soon to go into effect between the M&StL and Pullman-Standard Car Manufacturing Company.

Beginning with the delivery of two PS-1 box cars in mid-January, the M&StL will buy new cars to replace destroyed equipment. Often, when cars are badly damaged, a railroad either undertakes heavy repairs itself or scraps the equipment and thereby reduces the size of its fleet.

The plan works like this: When a car is destroyed, the M&StL will order as a replacement a "standardized" car from the Pullman-Standard line. Pullman-Standard will tack the order on the end of its current production schedule and, as a company spokesman put it, "we'll simply make one more car that day."

Out of this, the M&StL may get a car not exactly like the others in its series, but it'll get a replacement car as quickly as possible. "Our deliveries will be within several months, or sooner, after destruction of the equipment," says President A. W. Schroeder.

The M&StL will put the replacement units under its long-term purchase agreements. Then, rather than paying the lender some $6,500 to $7,000 as the fair market value of the destroyed car, it will buy replacement units with only a small additional cash outlay.

To help in figuring car production schedules, the M&StL has agreed to an orderly acquisition of replacement equipment, based on past experience. It won't be participating in another railroad's car order. Nor will it order cars with special design or extra equipment.

The cars will come from Pullman-Standard's line of five "standardized" PS cars—box, covered hopper, open hopper, flat and gondola.

Pullman-Standard calls the arrangement with the M&StL another benefit that railroads can derive from standardizing freight cars.

Trend to Stabilized Car Buying?

Railroad supply companies, and particularly the car builders, have long contended that more regularized purchasing by railroads would help offset the rising cost of freight cars.

Early this year the Delaware & Hudson took a pioneer step in this direction (Railway Age, May 27, p. 9). Acting upon "repeated requests" for regularized buying from builders, the D&H made a five-year contract with Bethlehem Steel under which D&H will get 200 70-ton hoppers each year for five years. In return, the builder will concede to the railroad, after the first 200 cars, a discount under the basic unit price for the remaining 800 cars—and the discount will increase in each of the last three years of the contract.

Honors for Westinghouse

George Westinghouse—inventor, financier, industrialist and stalwart pioneer in railroad transportation—will be honored December 1 in a ceremony which gives recognition not only to Mr. Westinghouse but to the entire railroad industry.

A bust of Mr. Westinghouse will be installed in the Hall of Fame, the national institution for Great Americans at New York University. The bronze to be unveiled will take its place with those of such famous Americans as Washington, Lincoln, Alexander Graham Bell, Mark Twain and Ralph Waldo Emerson.

Former President Herbert Hoover will deliver the principal address at the unveiling ceremony. Railroad leaders from this country and abroad are being invited to share in this recognition of a man who won perhaps his widest and most lasting fame through his contribution to railroads.

The contributions which Mr. Westinghouse made to modern railroad operation still are impressive, 43 years after his death. It is impossible to list all he did—his inventive talent alone produced close to 400 patents while his business proficiency made possible the formation of 60 companies in various industrial fields.

Within the railroad industry, particularly, his genius remains everywhere evident: the air brake, which he invented at the age of 23; improvements in the application of power to automatic signaling and interlocking switches; the friction draft gear; apparatus to perfect the electrification of locomotives, and an electrically operated brake for subway trains. He encouraged construction of the first all-steel passenger coach, built by the Pennsylvania.

Mr. Westinghouse was one of America's industrial pioneers—a fact well recognized even in his own lifetime but increasingly appreciated since his death in 1914. While much of his work was in transportation he never limited himself. If, in his practical way, he saw need for a new device, he invented it—then prepared to produce the product and supply it on a mass scale. Actually, he made major contributions in at least four fields—electrical, gas, rail and marine. He developed and introduced the steam turbine. He virtually opened the door to today's whole electrical era by championing the alternating current system and developing, simultaneously, a-c generators, a-c motors and the transformer.

Putting finishing touches on Hall-of-Fame bust of George Westinghouse, sculptor Edmondo Quattrocchi gets ready to cast likeness in bronze.

Despite his far-ranging interests, railroading always had an alluring appeal for Westinghouse. His invention of the air brake was typical: on a trip between Troy, N.Y., and Schenectady, he saw the results of a freight train collision which prompt braking would have prevented. He set about designing a safe, automatic brake. It took two years. The Westinghouse air brake, patented in 1869, was successfully tested, later became standard equipment on all railroads. It still is.

Railroading After Hours with Jim Lyne

ALL ABOUT THEIR RAILROAD—Personnel Director Bob Hicks of the New York Central has sent me a copy of a 36-page illustrated booklet, circulated among all employees and intended to answer the principal questions that come up about their railroad. It includes some of the road's history, the number of trains it runs, the size of its payroll, official holidays, pass privileges, retirement program, and the road's extensive capital improvements. This is the latest addition to quite a file of such booklets I've received (e.g., from the GN, the Milwaukee, the N&W and the PRR).

COMPLIMENT FROM LASHER—The other evening at the New York Railroad Club General Ed Lasher, head of the Defense Department's traffic management, made a speech describing his organization—and a questioner asked him to comment on the present quality of railroad service. The general recalled that he had reported some months ago on "expedited" rail service that required six days to get regular shipments of liquid oxygen from Chicago to Huntsville, Ala. He reported that, since he made that statement, the oxygen had failed only once to make fourth-day delivery—and that 'failure' was three-day delivery. He concluded that the railroads can give the service shippers need—it's just a question of supervision taking the responsibility to see that it's done.

NOT ENOUGH SUPERVISION?—That observation reminds me that I hear more and more talk about the lack of adequate supervision, in a lot of places, but especially in those that have to do with keeping cars on the move. One railroad seems to have solved this problem (or never allowed it to develop) by hiring and training a lot of vigorous young trainmasters—boys with plenty of energy who don't mind working hard, and at all hours.

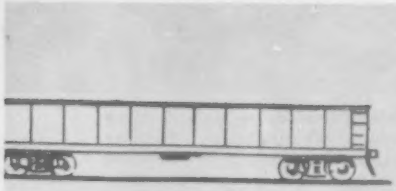
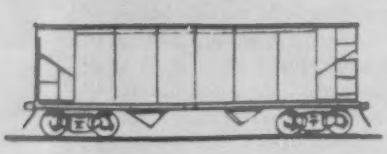
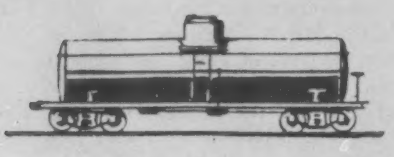
You put in a big piece of 'automatic' plant, say a yard, but nothing is 'automatic' about getting such improvements to operate profitably. It takes supervision to do that, and when many new gadgets are involved, it helps to have some quick-learning youngsters around to master the novelties fast.

WOMAN RAILROADER—There's a big, fat book out, called "Atlas Shrugged," authored by a lady named Ayn Rand. It is one of these fiction pieces dated in the future, and the action centers around a make-believe railroad—with a wishy-washy president and a hard-boiled operating vice-president (who happens to be the president's sister). That is a set-up that's pretty hard to believe, but it doesn't hurt the story any.

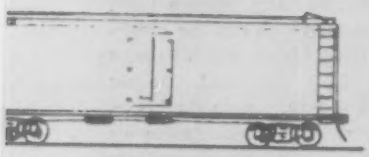
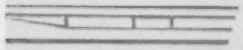
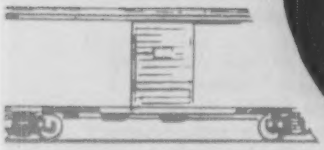
The author's purpose in writing the book is to dramatize her conviction that do-goodism and semi-socialism in business is a mighty bad thing for the country; and that real progress is made, not by the uplifters, but by the tough leaders who are not ashamed of being in business to make money.

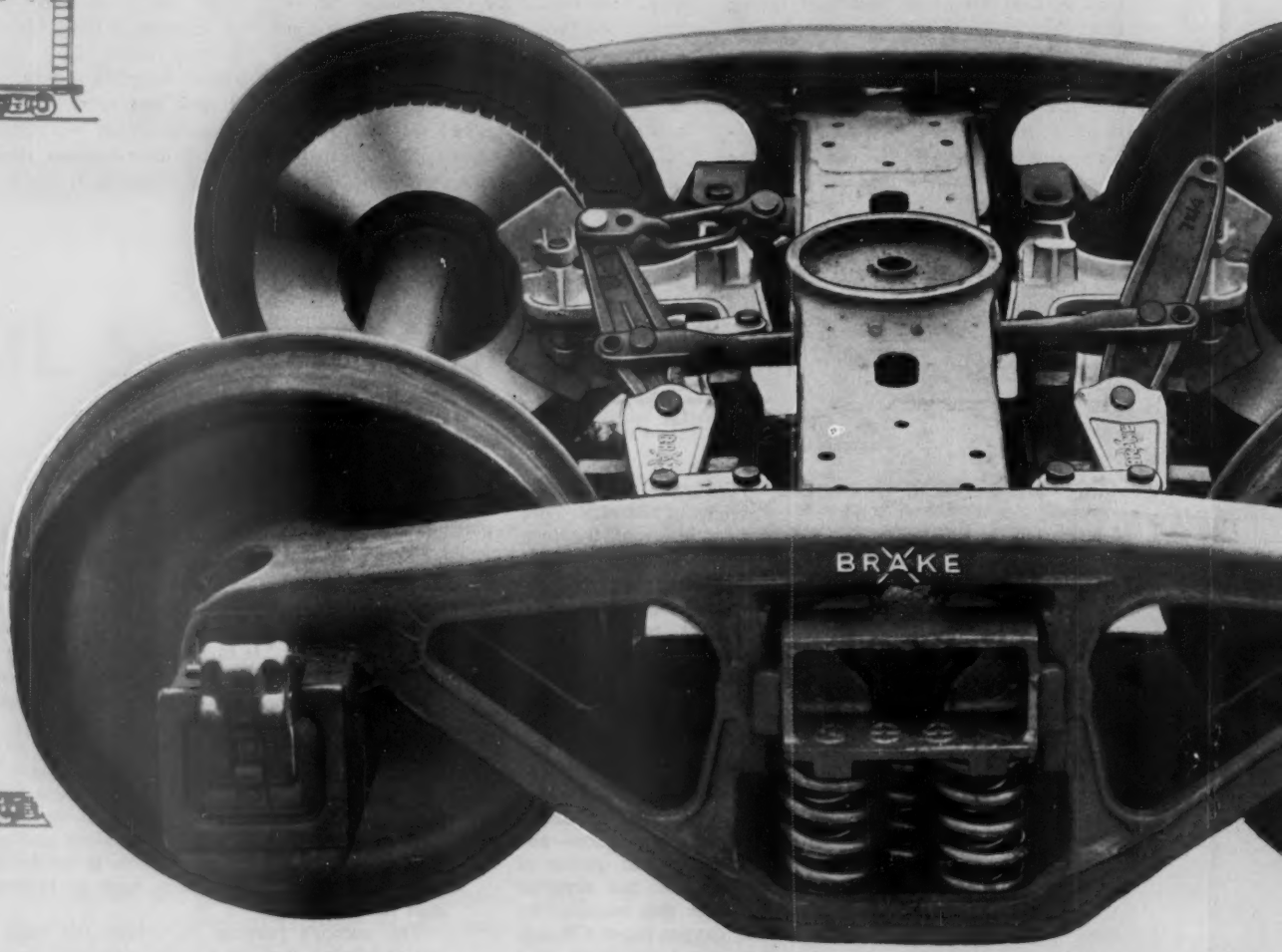
The book is doubtless going to be controversial and, because railroads are at the center of it, railroad people are likely to find themselves involved in the discussion. For instance, the author has a railroad magnate (whom she admires) throw down three flights of stairs "a distinguished gentleman who offered him a loan from the government."

NOTHING LESS makes a M

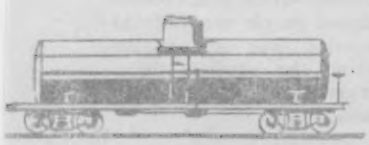
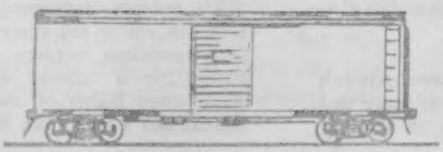
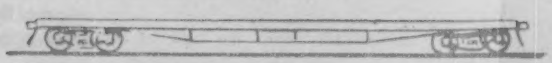




ALMOST A MILLION TEST-MILES IN ACTUAL REVENUE SERVICE HAVE DEMONSTRATE

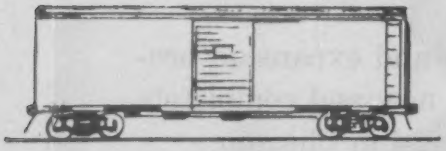


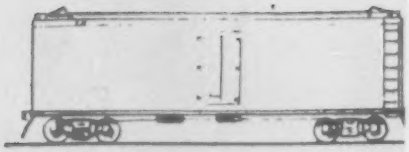
THAT BRAKE-X TRUCKS WILL OUTLAST ANY FREIGHT CAR THAT WILL EVER BE BUILT . .

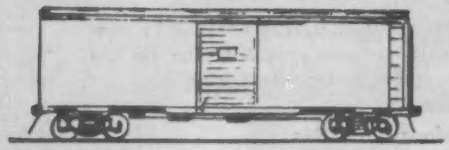
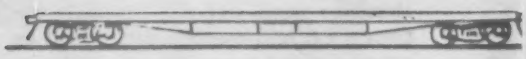
Buffalo Brake Beam Company • **New York, Buffalo, Hamilto**

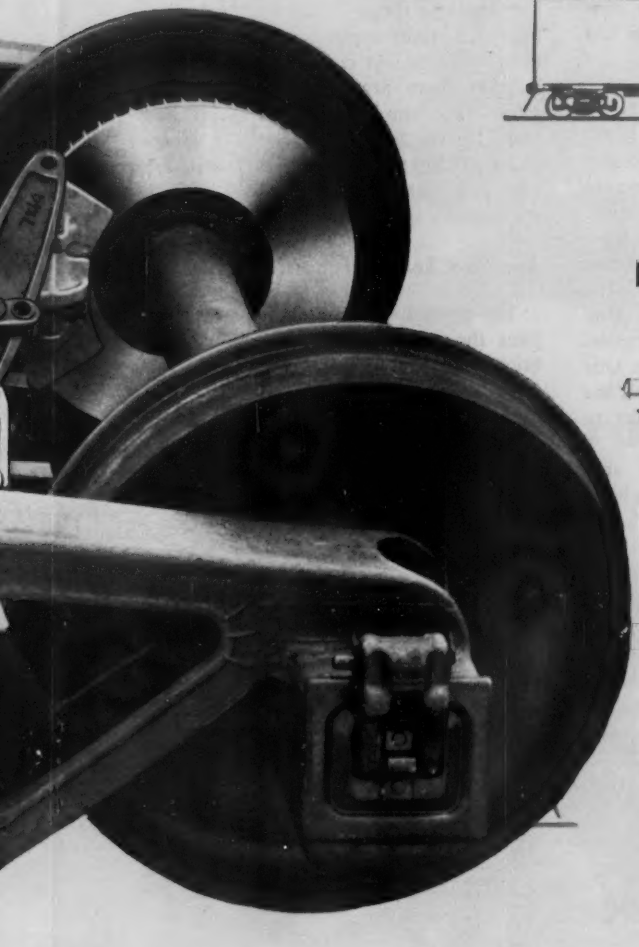
a MODERN FREIGHT CAR



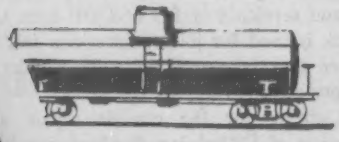
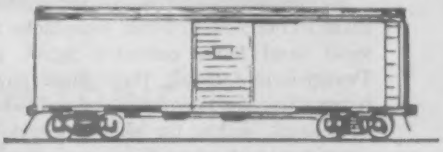


NSTRATED BRAKE-X PERFORMANCE . . . . SMOOTH POWERFUL DECELERATION WITH

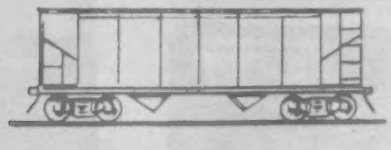
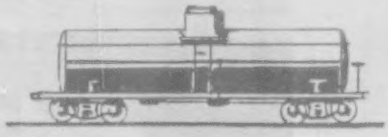





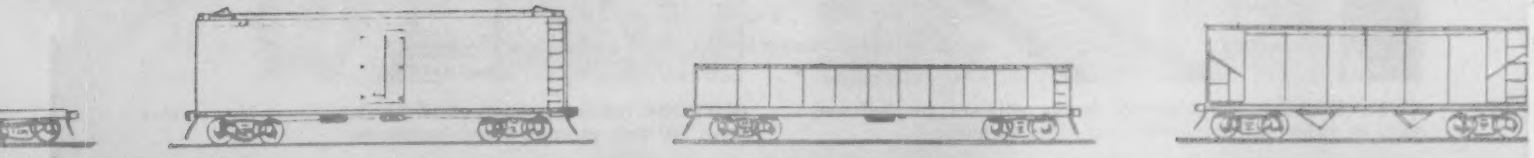
PRACTICALLY NO MAINTENANCE UNDER EVERY

CONCEIVABLE OPERATING CONDITION INDICATE

BUILT . . . . NOTHING LESS THAN BRAKE-X DISC BRAKING MAKES A MODERN FREIGHT CAR.



Hamilton, Ont. • **First with the newest in freight car braking**

AT SANTA FE'S CORWITH YARD . . .

Shop Makes Fast Car Repairs Easy

As one phase of its extensive yard modernization and expansion program, the Santa Fe has recently placed in service a new and completely up-to-date freight-car repair facility at its Corwith yard in Chicago.

Its most impressive part is the car-repair shed, 75 ft wide and over 1,360 ft long. The shed encloses three tracks accommodating 72 cars which can be selectively switched from either end of the building. Repairs to bad order loads are handled within the shed.

The shed, designed to Santa Fe specifications, is of rigid-frame construction. The roof and side walls are of standardized aluminum panel sections. The walls rise from a 6-ft high concrete curtain wall on either side and incorporate standard windows and translucent skylighting in the upper wall and roof sections. The full concrete platform floor incorporates full-length jacking pads integrally cast with floor slabs. The six end doors are of the rolling steel type, motor driven and push-button operated.

Service connections within the shed include 105 duplex, 115-volt, receptacles for small hand tools, extension lights, etc. Twenty-four 440-volt, three-phase power receptacles are regularly spaced along each track within the shed for welding generators and other heavy power tools. Three air lines, with a total of 75 connections, are also provided. The air line connections are spaced 55 ft apart.

Outdoor Facilities

The outdoor repair area incorporates four 1,361-ft tracks with full concrete platforms extending parallel to each track. These tracks, like the shed tracks, have full-length jacking pads monolithically cast with the platform slabs. This repair yard area accommodates some 96 cars. One track is used exclusively for light repairs to and servicing of PD and DF cars. One track is used for joint inspections and the other two take care of light repairs to empty cars.

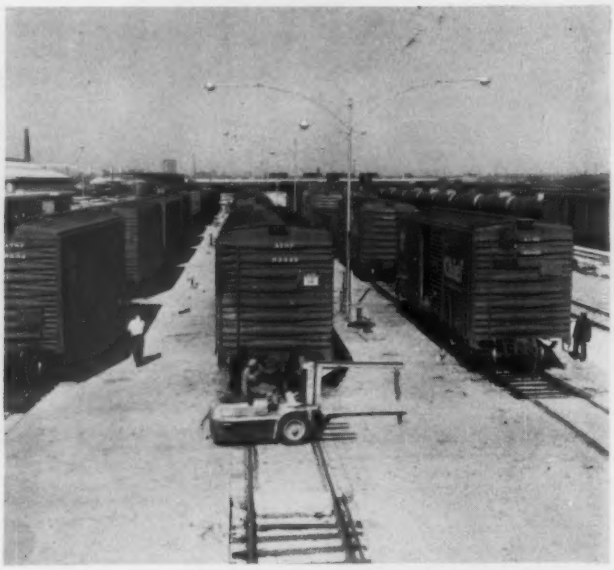
Lighting for the outside repair area consists of 12 lighting standards, each incorporating three 400-watt, color-improved, mercury-vapor luminaries, individually switched. At each lighting standard location there are two 440-volt, three-phase, 100-amp power receptacles and two 115-volt duplex, weatherproof receptacles. These tracks, as in the shed, are equipped with full-length air lines with connections spaced at 55-ft intervals.

Auxiliary Service Facilities

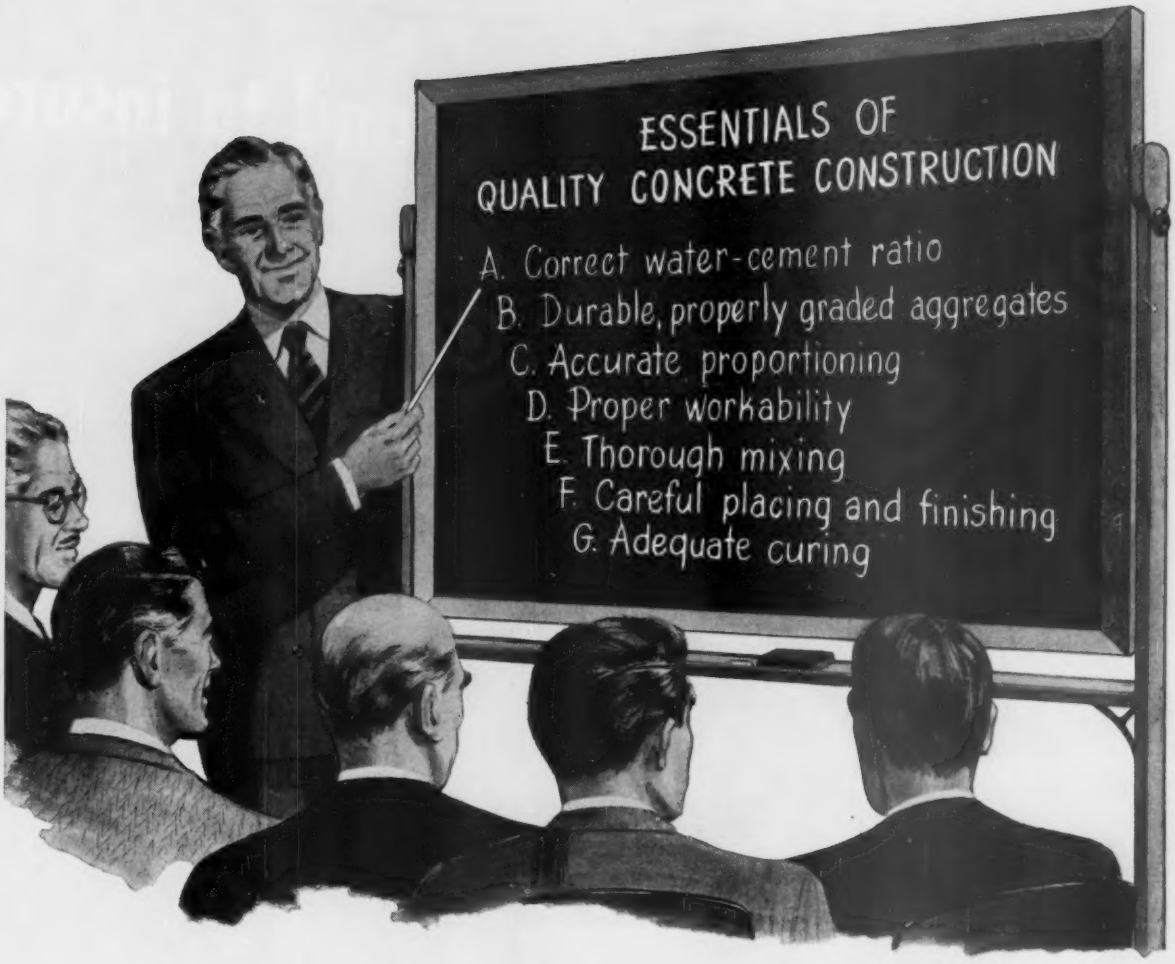
The general service building, which adjoins the main shop, is of conventional brick and structural-steel construction and is 32 ft wide by 302 ft long. For 177 ft of its length, the building incorporates two levels containing offices, locker, shower and lunch rooms. The remainder of the

(*Continued on page 42*)

TWELVE double wheel-storage tracks adjacent to shed are open on either end for continuous wheel turnover.



OUTDOOR lighting consists of 12 standards, each incorporates three 400-watt mercury-vapor luminaries.



Helping railroad men solve their concrete construction problems

In order to help railroad engineering and construction staffs use cement and concrete in the most efficient and economical manner, the Portland Cement Association conducts its well-known "Quality Concrete Schools." These schools are designed to keep railroad personnel abreast of the many advances in construction practices as well as to review the basic principles of making quality concrete. Since the first course in 1951, a total of 75 schools have been conducted for 2,500 railroad men employed by 39 major railroads.

The PCA Schools are offered to railroad engineering and construction staffs without cost or obligation. The schools can be held at the time and place most convenient for the railroad personnel involved. The training will help all railroad men understand the characteristics of plastic and hardened concrete, the proper aggregates to use, the designing of suitable mixes and the best construction details and field practices to be employed for all types of concrete railroad construction. The courses have proved to be of great value as refresher sessions for older employees and training sessions for new personnel.

Schedules for 1958 PCA Quality Concrete Schools are now being prepared. For additional information on this helpful service, write at once to the Structural Bureau of the

PORTLAND CEMENT ASSOCIATION

33 WEST GRAND AVENUE, CHICAGO 10, ILLINOIS

A national organization to improve and extend the uses of portland cement and concrete through scientific research and engineering field work

A Message to Management...

To reduce weight and to insure

Talgo car underframe combines great strength with minimum weight

USS "T-1" Steel, which has a minimum yield strength of 90,000 psi, nearly 3 times that of structural carbon steel, is used in about 69% of the light and rugged underframe. The center sills that carry the main longitudinal stresses are of USS "T-1" Steel, as are the coupler housing, draft gear pockets, and collision posts. USS COR-TEN, with a minimum yield point of 50,000 psi, 1½ times that of structural carbon steel, is used in cross members, stringers, Zee-section side sills, and tapping plates.

USS High-Strength-Level Steels help reduce weight 20,000 lbs. per car*

The weight saving of 50 tons in a typical five-car Talgo train is important. Accomplished with the help of USS COR-TEN and USS "T-1" Steels, it allows the use of less motive power, permits fast acceleration and deceleration for multi-stop, commuter service. Despite the lighter weight of the Talgo cars—only 700 or 800 lbs. per passenger seat and less than half the weight of comparable conventional equipment—the high strength levels of the steels used make it possible to meet the high unit strength requirements and the 800,000-lb. buff load for which the cars are designed.

**As compared to construction with structural carbon steel.*

• • •

As illustrated at left, the ACF Talgo-type cars are composed of three articulated units, semi-permanently coupled together. Wheel units are mechanically guided so that the wheels always meet the rails at what ACF calls a zero angle, regardless of whether the train is going forward or backward and no matter what degree of curve the train is passing through. The result is a reversible car that provides a comfortable ride, noticeably free of side sway even at speeds up to 90 mph on light rail with twisting curves, where speeds for conventional equipment are limited to 70 mph. Wheels and axles, furnished by United States Steel, were modified jointly by ACF and USS for Talgo use.

speedy, safe and low-cost operation

ACF builds new Talgo-type trains with two outstanding USS Specialty Steels: USS COR-TEN High-Strength Low-Alloy Steel USS "T-1" Constructional Alloy Steel

In its advanced version of the Talgo train, ACF offers three highly desirable benefits: (1) low first cost, (2) lower operating and maintenance expense and (3) a train that can be operated on faster schedules without excessive top speeds. And because the elimination of excess weight is of prime importance in attaining these benefits, ACF engineers just naturally turned to construction materials that have proved practical and profitable in reducing weight to a minimum.

ACF's new Talgo train marks a big step forward in passenger train design. It incorporates many important advancements in the basic ideas featured in the revolutionary, money-making streamliners of the early "thirties"—low profile, extremely light weight, articulation and head-end power. And it is built with the same strong, durable, weight-saving steel, USS Cor-Ten, plus an important newcomer—USS "T-1" Constructional Alloy Steel.

Just as the use of superior steels helped make yesterday's so-called "trains of the future" profitable to operate, the ability of USS Cor-Ten Steel and USS "T-1" Steel to reduce weight safely and to greatly increase durability will likewise pay off in the new Talgo trains.

By the judicious use of these strong, durable steels, ACF engineers have been able, in the Talgo train, not only to produce a car structure that is exceptionally strong and durable, but to provide a passenger seat for 50 to 75% less weight per passenger than conventional designs—and at $1500 lower cost per seat. At the same time, because of the lighter weight, low center of gravity, and because the wheels are steered through curves, the Talgo train is capable of cutting as much as 25% off conventional schedules with relatively little increase in top speeds.

In USS Cor-Ten Steel, and USS "T-1" Steel, car designers will find a ready answer to their search for superior materials for reducing passenger car weight safely—and economically as well.

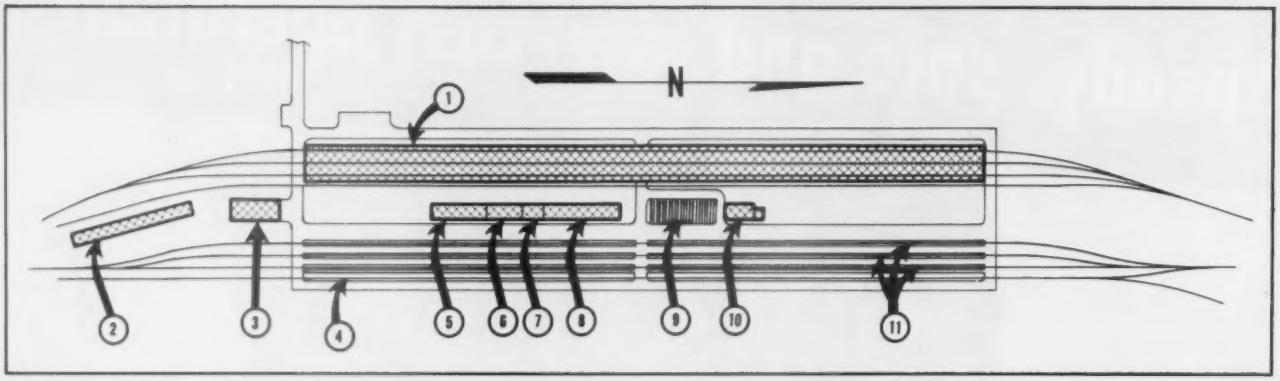
We welcome the opportunity of working with you in applying them to *your* trains of tomorrow.

United States Steel Corporation, Pittsburgh • American Steel & Wire Division, Cleveland
Columbia-Geneva Steel Division, San Francisco • National Tube Division, Pittsburgh • Tennessee Coal & Iron Division, Fairfield, Ala.
United States Steel Supply Division, Warehouse Distributors
United States Steel Export Company, New York

USS, COR-TEN and "T-1" are registered trademarks of United States Steel

1933 / 1957 USS HIGH STRENGTH STEELS *24 YEARS OF PERFORMANCE*

UNITED STATES STEEL



CORWITH CAR REPAIR FACILITIES: Main car repair shed (1) is 1,362 ft long and contains three tracks; lumber shed (2) supplies planing mill (3) and other needs. Main service building contains machine and blacksmith shop (5), woodworking shop (6), brake and pipe shop (7), with remainder of building devoted to office space, lockers, lunch and shower facilities (8). Wheel storage tracks (9) are open on each end to eliminate "pile up" of wheels. Smaller building (10) is of brick construction and contains oil and packing facilities and air compressors. One of the three main outdoor tracks (11) is solely for the servicing of DF and PD cars; the other (4) is the conditioning track.

(Continued from page 38)

building houses the tool room, air room, machine shop, welding room and blacksmith shop.

Between the main repair shed and the outdoor repair tracks, there are 12 double wheel-storage tracks. These tracks are open on either end in order that wheels may be placed on the tracks at one end and removed at the other—thus insuring a continuous turnover of wheels.

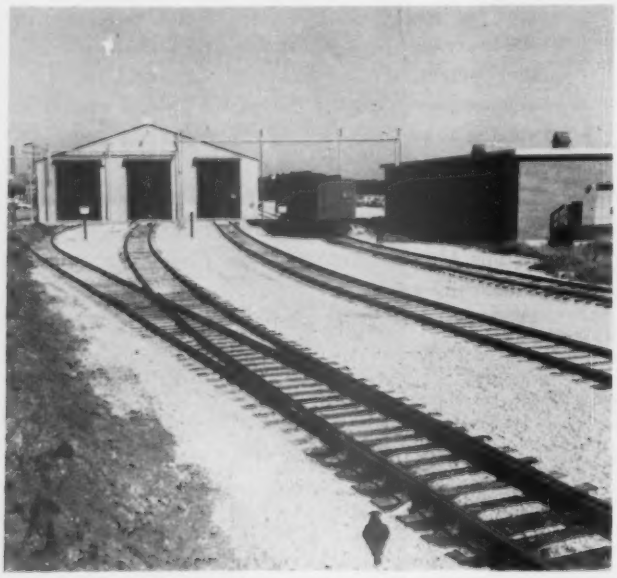
Immediately adjacent to the wheel-storage tracks is a new 32-ft by 60-ft brick and steel building for handling waste packing, oil and paint storage. In the packing room are five large packing vats. Two are of the three-compartment type for accommodating lubricating pads. The other vats are designed so they can be readily modified to handle future lubricator pad requirements as the need for waste decreases in the coming years. Oil for packing, as well as for boxes, is piped to the oil house from a 10,000-gal capacity underground storage tank. Air for the entire car-repair facility is supplied from two 450-cfm compressors. These compressors are air cooled, driven by electric motors, supplied with filtered air, and are equipped with radial coil aftercoolers.

At the south end of the facility, a planing mill and lumber storage shed are located between the tracks serving the car-repair shed and those serving the repair yard. The brick and steel planing-mill building is 40 by 110 ft. The adjacent lumber storage shed, 24 by 200 ft, is connected to the mill building by concrete runways.

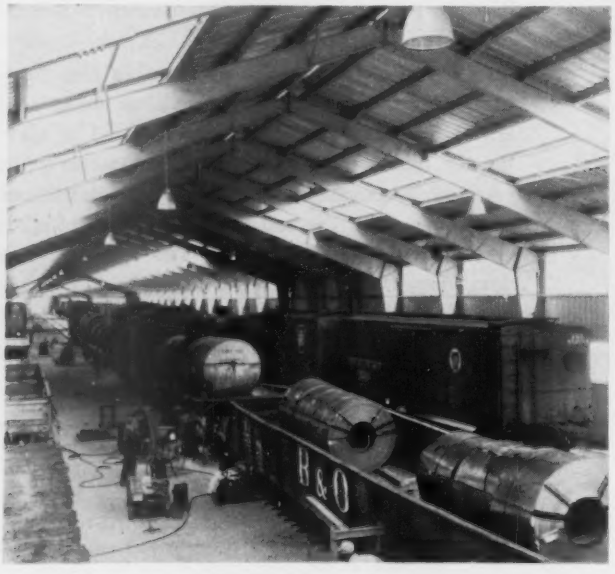
All of the auxiliary buildings—the planing mill, shops, packing room, paint house, air compressor room, etc.—are lighted with industrial-type fluorescent fixtures.

To achieve greater overall efficiency of operations, the repair facilities are equipped with a combination telephone and paging system. This arrangement works as an integral part of the entire yard communications system which includes a radio repeater station in the general car foreman's office, walkie-talkie sets for train-yard inspectors and foremen, and the paging and talk-back system in the general train yard.

New mechanized equipment acquired by the Santa Fe for use in connection with its car-repair activities includes two 5,000-lb capacity lift trucks, two 2,000-lb Speed Trucks, one power sweeper, and two 5-ton cranes.

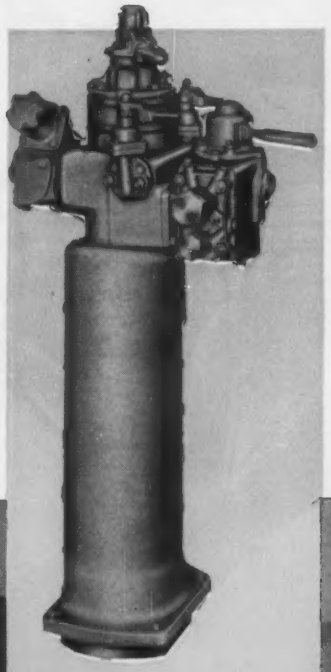


REPAIR SHED tracks allow selective switching at either end. Building at right is planing mill.



LOTS OF LIGHT. Standard windows combined with extensive skylighting provide maximum daylight illumination.

"Boy! He handles that thing just like a taxi!"

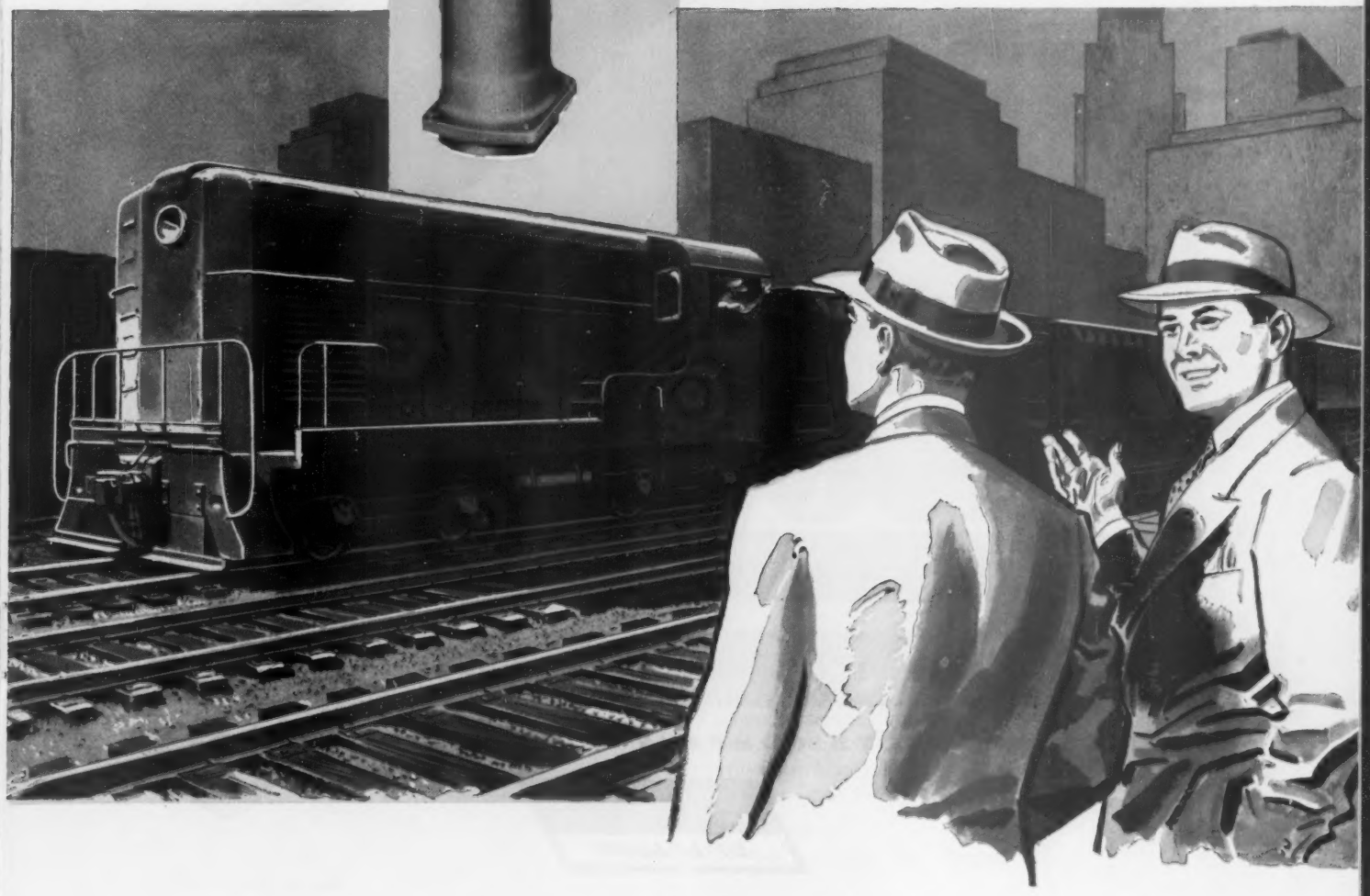


The Westinghouse Air Brake 6-SL Brake Equipment

THE day is gone when yard locomotive engineers spent more time controlling the locomotive than they did switching cars. Now, with the aid of Westinghouse 6-SL Brake Equipment, yard locomotives are controlled easily and accurately, and the engineer can devote his full attention to the switching operation.

The 6-SL Brake Equipment is built specifically for yard switchers. It provides a high degree of flexibility—matching that of the Diesel switcher itself. It performs along with the Diesel, 'round the clock, and thereby contributes to the high working availability of yard switchers.

The 6-SL Brake provides all the basic functions that enable a modern yard switcher to perform most productively and economically.



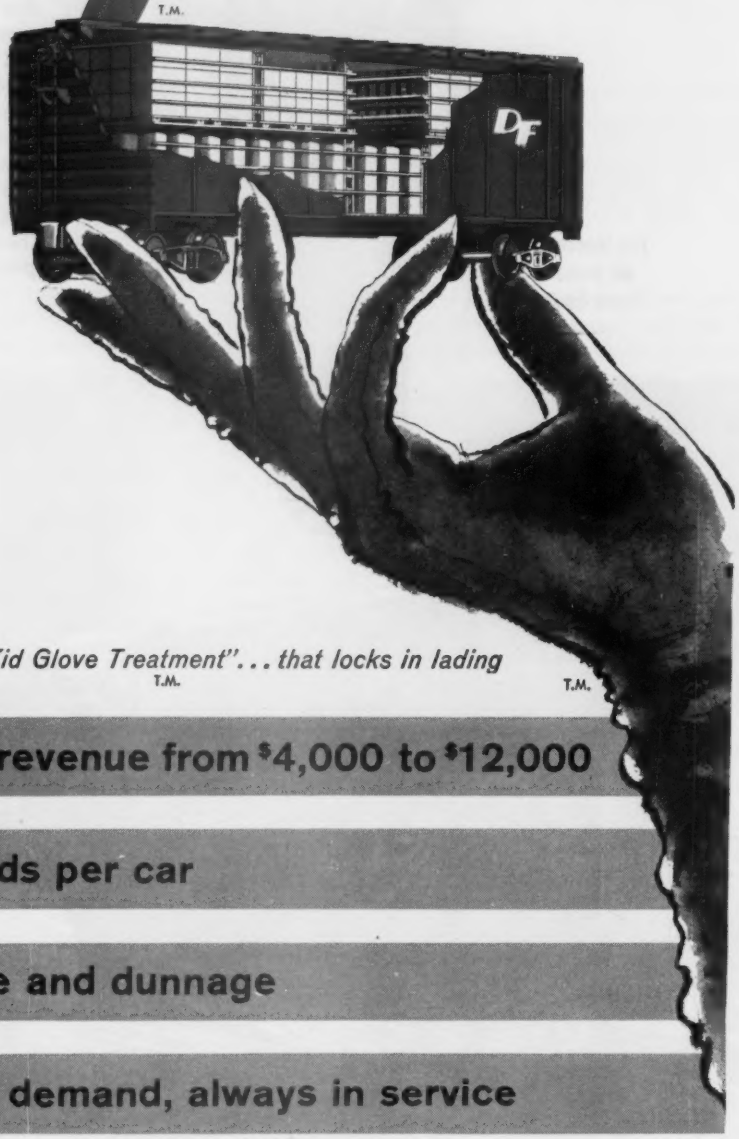
Westinghouse Air Brake Company

AIR BRAKE DIVISION ® WILMERDING, PENNA.

EVANS DF CARS...

T.M.

popular and profitable



The "Kid Glove Treatment"... that locks in lading
T.M.

T.M.

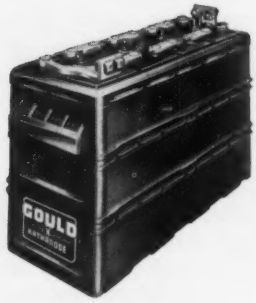
- DF raises a box car's revenue from $4,000 to $12,000
- DF allows heavier loads per car
- DF eliminates damage and dunnage
- DF cars are always in demand, always in service

EVANS PRODUCTS COMPANY • PLYMOUTH, MICHIGAN

EVANS DF LOADER

EVANS PRODUCTS COMPANY also produces: Evaneer fir plywood; Evanite hardboard; fir lumber; Evanite battery separators; truck and bus heaters; Evans bicycles and velocipedes

You Get "Hidden Horsepower" from gould BATTERIES



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GOULD
KATHANODE BATTERIES
for Diesel Starting

Behind every Gould Battery is the industry's largest field engineering staff

Gould engineers train your personnel . . . set up preventive maintenance programs . . . establish efficient battery charging methods . . . and otherwise help you make use of the "Hidden Horsepower" in every Gould Battery.

Specify Gould and see.
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Always Use Gould-National Automobile & Truck Batteries *More Power to you from Gould*

New Products Report

Transistorized 2-Way Radio

Compact, transistorized two-way radio especially adapted for use on fork lift trucks, tractors, trucks or automobiles is now available. There's room for the "Dispatcher" radiophone on often cramped-for-space industrial vehicles. This miniaturization has been accomplished by extensive use of transistors and plated circuitry. With transistors, battery drain is held as low as one-eighth previous consumption of mobile radios. It is available in models for all the battery voltages found on industrial vehicles. Models are available in both of the mobile radio bands, 50-50 mc and 152-174 mc.

One type of unit is completely self-contained for installation in a single mounting location near the operator. The other separates the radio set from the speaker, microphone and controls for installations where space considerations dictate separate mounting of the two units. The unit can be mounted horizontally, vertically or roofs of overhead crane cabs. *Motorola Communications & Electronics, Dept. RA, 4501 W. Augusta blvd., Chicago 51* •

Versatile Digger

A new four-wheel-drive earth-boring and pole-setting vehicle has been developed for spot installation of new and replacement poles and for new line construction and operations ordinarily requiring use of crawler tractors. According to the manufacturer, the new unit—called the Blue Ox Utility (BXU) digger—has traction and maneuverability characteristics enabling it to traverse soft grades and other types of adverse terrain.

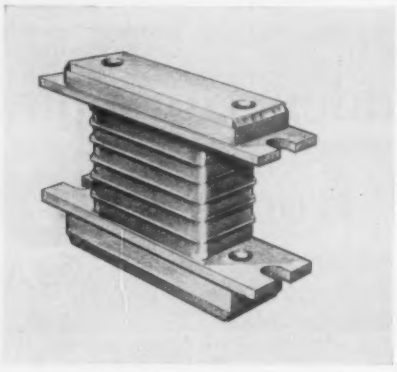
The BXU has rear-mounted digger and winch and can be equipped with an additional front-mounted winch.

Drive power is constant to all four wheels; positive traction is provided through oscillating front springs and high ground clearance. Front springs lock for stability during digging. The unit is equipped with a 308-cu in., 150-hp engine, with full torque power takeoff for digger and SAE power takeoff for winch operations. It has a five-speed standard transmission and auxiliary transmission for creeping speeds necessary in moving poles. *Four Wheel Drive Auto Company, Dept. RA, Clintonville, Wis.* •

Improved Electric Lantern

A steel and aluminum lantern, designed specially for railroad service, has a heat-treated aluminum bail with heavy neoprene coating. This provides a firm grip, and resistance to oil. The bail stays in position, yet may be moved readily on a permanently fixed rivet attachment which reportedly has been tested for 15,000 operations without losing original tension.

For permanent brightness, the reflector is of stainless steel. It throws a broad, strong signal, or a spot. *Adams & Westlake Co., Dept. RA, Elkhart, Ind.* •



Traction Motor Nose Mounting

A traction motor nose support mounting which resists high shock loads has been developed for use on standard railroad traction motors. The mounting consists of specially compounded environmental resistant elastomer bonded to steel plates. The one-piece construction eliminates assembly and replacement of parts.

This new bonded rubber mounting is interchangeable with present suspension systems. *Lord Manufacturing Company, Dept. RA, 1635 West 12th st., Erie, Pa..* •

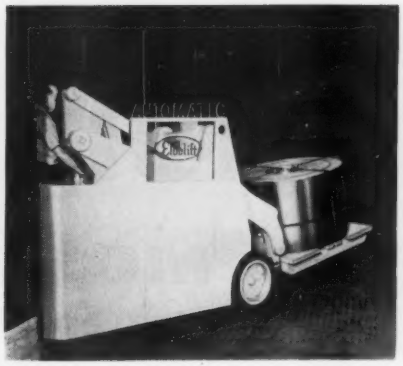
Odor-Control Additive

Reduction of obnoxious and offensive exhaust odors caused by diesel operated equipment is said to be possible through the use of Alamask DI-2K, an odor controlling additive. Independent testing has indicated that the formulation does not produce any adverse effects upon engines or their operating efficiency.

It requires no special handling devices and may be added directly to the fuel while filling, blending or loading. *Rhodia, Inc., Dept. RA, 60 East 42nd st., New York 22* •

Castors for Power Ditcher

The twin castor wheel assembly for the Model 702 ditcher will now be offered as an optional on all machines of this type, which normally are equipped with a single, centrally located castor. In some types of urban service work, e.g., in laying service lines across paved streets, it is sometimes the practice to break out the pavement ahead of the ditcher. When the trench is dug through this broken out area, the twin castor wheels straddle it. *Barber-Greene, Dept. RA, 400 N. Highland ave., Aurora, Ill.* •



Fork Lift Minus Mast

A fork lift truck that will lift 10 feet without a mast is the Model MF-150 Elboloft. Tests included moving 15,000-lb, 52-in. square loaded pallets in and out of a box car, operating through a 78-in. car door and through a 13-ft. 8-in. right-angle aisle. According to the manufacturer, elimination of the mast assembly results in a saving of thousands of pounds in overall weight, plus an increase in driver visibility, better load distribution and stability. *Automatic Transportation Company, Dept. RA, 149 West 87th st., Chicago 20* •

Removable Ripper

The No. 4 ripper attachment has been designed for use with 60-in. gage D4 tractors having grouser widths up to 18 in. The new tool is constructed to withstand rugged ripping operations, allowing such materials as shale, hardpan, and rocky or frozen ground to be handled easily. It is hydraulically raised and lowered and is equipped with three alloy-steel teeth having replaceable tips.

Because the teeth are removable, the No. 4 ripper has three notable features. It provides the user with a choice in the number of teeth—from one to five. The teeth may be inserted backwards so that work can be performed to the edge of vertical walls while the tractor is backing up. The attachment provides 15¼-in ground clearance.

The design includes parallel linkage which is said to maintain a uniform ripping angle at all penetration depths. This not only produces maximum ripping action but also protects the hydraulic system by reducing cylinder pressures. Also, the design permits full power of the machine to be absorbed by one tooth at maximum penetration. *Caterpillar Tractor Co., Dept. RA, Peoria, Ill.* •

Power-Feed Attachments

Digging holes into hard ground with Holan diggers, without employing a man to guide the operation, is now said to be possible by the use of three new power-feed attachments. The downward force is created entirely by the weight and hydraulic power of the live-boom derricks.

Used with the three types of live-boom derricks available for Holan line-construction-body trucks, the attachments are mounted on one of the three legs of the derricks to hold the power-feed mechanism powering the diggers. The linkage is attached to the side legs, whereas the bracket types are located on the middle leg.

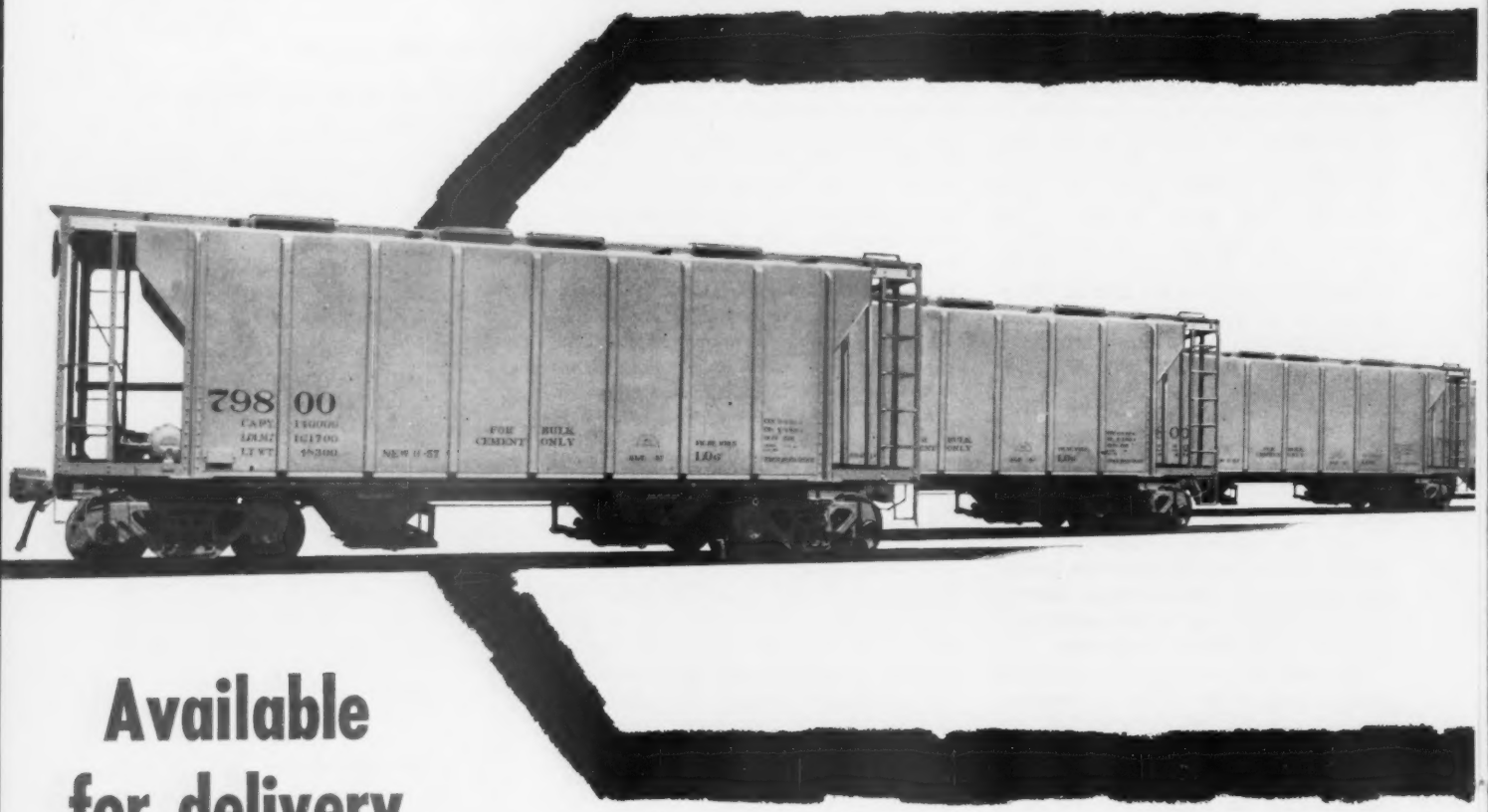
The two bracket types make it possible to get under low lines easier because the digger is close to the derrick. The 4411 has a torque arm for the built-in swivel. An optional torque arm can be provided for applications where the digger is detached from the 4412 bracket. All derricks, diggers and power feeds stow overhead and the diggers with power feed need not be removed for pole-handling. *J. H. Holan Corporation, Dept. RA, 4100 W. 150th St., Cleveland 11* •

◄ Rolling Type Bridge

A new rolling type bridge for spanning the opening between cars in TOFC service has been developed. By use of a pair of small flanged wheels at the rear of the bridge running on a track built into the car structure, with a second pair of wheels mounted on a curved cantilever spring at the end of the car, the bridge can be moved across the gap with little effort, according to the manufacturer. In running position, the bridge is retracted and lies horizontal. *Brandon Equipment Company, Dept. RA, 332 S. Michigan ave., Chicago 4* •

another acf PRODUCTION DESIGN

FOR MORE REVENUE



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JANUARY–FEBRUARY '58

CH-29
with 2006 cubic foot capacity

CH-41
with 2927 cubic foot capacity

Designed to meet the requirements of every Class I line in the United States, the acf Production Design Cars are the products of years of intensive development and testing. They are designed to give you better service and longer life at lower cost than any other cars you could buy or build. All acf Production Design Cars offer faster delivery and lower initial cost than "special" cars, for standardized construction assures mass-production speed and economy. Ask your acf Representative for full information, design details, specifications, price and delivery. Contact any acf office.

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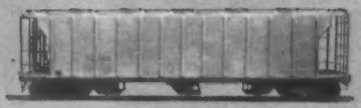
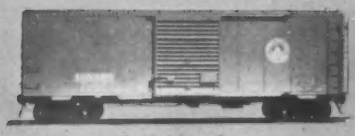
CAR MILES



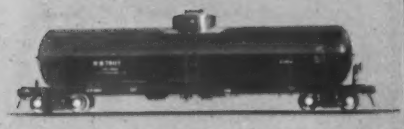
CH-41 Covered Hopper Car.

B-50-15 Box Car.

OTHER PRODUCTION DESIGN CARS



B-40-8 Box Car.



19,000 gallon Tank Car.

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PRODUCTION DESIGN FREIGHT CARS

How to *squeeze* more revenue out of your freight cars

LIKE GIANT HANDS "Centralized Traffic Control" and the "VELAC* Automatic Classification Yard System"—the two most significant advancements in modern-day railroading—help you squeeze more revenue out of your freight cars because they keep them rolling.

Keeping your freight cars moving drastically reduces the total number of cars needed. Thus, C.T.C. and VELAC let you get far more service out of the cars you now have, speed up deliveries, improve schedules and save millions of dollars in reduced equipment investments, taxes, and operating expenses.

One of the pioneers in the design of Automatic Freight Classification Yards and C.T.C., Union Switch & Signal enjoys an outstanding record of technical achievement. Our engineers are ready to help you plan a modern C.T.C. system tailored to your traffic, or a VELAC Fully-Automatic Classification Yard System. Both of these improvements pay for themselves in a few years. Write for complete information to any of the offices listed below.

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SWISSVALE, PENNSYLVANIA

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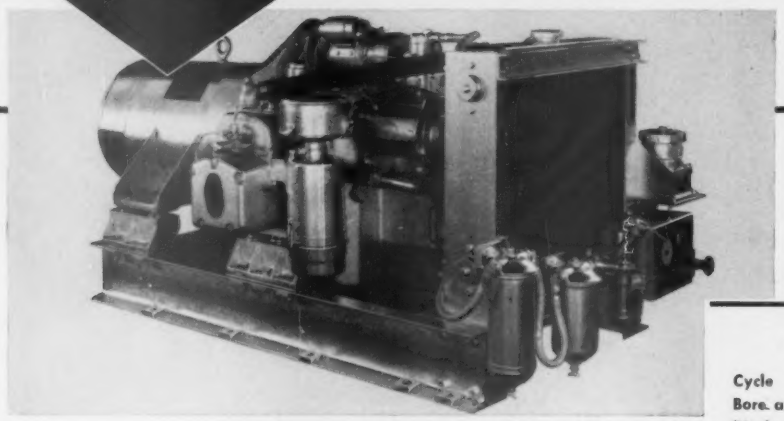
VELAG

WITTE DIESEL POWER FOR MECHANICAL REFRIGERATION IN REEFERS -10°F TO 70°F

The Witte Diesel Model 100RDA is setting outstanding records as the engine-generator unit for 50' mechanically refrigerated reefers.

It is simple, compact, *less than 30" high*, and uses standard diesel fuel. Its low center of gravity assures stability in high-speed railway transport.

The opposed-cylinder design of the prime mover results in a smooth-running unit, which is built for continuous 24-hour-a-day operation. Write for full information.



BRIEF SPECIFICATIONS

Cycle	4
Bore and Stroke	4" x 4"
Displacement	100 cu. in.
Speed	1,800 rpm
Horsepower:	
Continuous	18
Maximum (Bare Engine)	23.7
KW (Continuous)	12

WITTE ENGINE WORKS

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UNITED STATES STEEL

RESULTS

You want results, we have the answer. *Proven results* can be yours through the use of our head and valve service now.

You want the best performance possible from your equipment, with the least amount of maintenance, for the lowest cost and extended life.

We are always at your service to give you just that. Our Diesel Reclamation Service Nichrome valve seat inserts installed in your heads, in conjunction with our hard faced valves have proved the above results possible.

List of satisfied customers sent on request.

DIESEL RECLAMATION SERVICE *Company*

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FOR PROVEN DEPENDABILITY

LONG LIFE

HIGH CAPACITY

FREE SWIVELING TRUCKS

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ORTON

the most *POWERFUL*
name in CRANES...
and *PILE DRIVERS*

An ORTON Pile Driver *built to specification* hoists, rotates, travels and operates the pile-driver leads, powered by a GM diesel engine with fluid torque converter. Self propelled at 24 mph on level track. Easily negotiates 5% grade; pulls 10 loaded cars weighing 70 tons on level—or 1 such car on 4% grade. Hydraulic pumps and auger attachments. Ask for catalog No. 90.

An ORTON *Combination* PILE DRIVER, 160-ton DIESEL WRECKER and BRIDGE DERRICK *built to specification*. Pendent pile driver leads permit batter in both directions. Con be equipped for use with air or diesel-operated hammer. Above: in use as a pile driver; large photo at left: same machine as a wrecker. Ask for catalog No. 89.

All ORTON cranes operate on STRAIGHT DIESEL POWER. This enables ORTON to give a 10-year guarantee on travel gears without limitation due to accident, derailment, misuse or other cause. Idles at 600 rpm instead of 1800; reduces engine wear immensely; reduces fuel consumption to about ¾ of diesel electric operation. No danger of setting fire to combustible material on road beds. Moisture—even flood waters, won't immobilize an ORTON straight diesel machine.

ORTON CRANE & SHOVEL CO., 608 S. Dearborn St., Chicago 5, Ill.

Current Publications

PERIODICAL ARTICLES

CURRENT DEVELOPMENTS IN RAILROAD EQUIPMENT FINANCING, by Leonard D. Adkins and De Forest Billyou. I.C.C. Practitioners' Journal, September 1957, pp. 1187-1194. Association of Interstate Commerce Commission Practitioners, 1112 ICC Bldg., Washington 25, D.C. Single copies, $1.50.

Outlines briefly various forms of equipment financing including the Philadelphia Plan, leases, conditional sales, financing rebuilt equipment and a modified Philadelphia Plan. The authors also discuss the enforcement of equipment obligations and federal recordation.

•

THE CITY AND THE CAR, by Francis Bello. Fortune, October 1957, pp. 156 et seq. Time Inc., 9 Rockefeller Plaza, New York 20. Single copies, $1.25.

Mass transportation created the modern city. The automobile, many planners fear, may destroy it. Should the city bet on new transit systems, or will it be able to master the problem of the multiplying automobile? This is the question under discussion in Part II of the series on "The Exploding Metropolis."

PAMPHLETS

POWERED BY PEOPLE. 38 pages, illustrations, map. Norfolk & Western Railway Magazine and Advertising Department, Roanoke 17, Va. Free.

Designed to give N&W personnel a short history of their railroad as well as an outline of current operations, this little pamphlet also promotes good will and improved public relations.

•

TRANSPORTATION RESEARCH: A SURVEY OF CURRENT AND POTENTIAL TRANSPORTATION RESEARCH SUBJECTS. 30 pages. Transportation Association of America, 6 North Michigan ave., Chicago 2. Free.

The brochure, result of an extensive survey conducted by the TAA staff with assistance of research experts in many fields, reveals that while transportation developments and problems are being given extensive consideration in various projects throughout the country, there are many gaps in which new research may be advisable.

The study lists 176 projects under way by organizations, industries, government agencies, foundations and universities, and also lists 94 "gap areas"—subjects which have been suggested for study but on which no known work is currently under way. The report is divided into two major parts, each subdivided into the various fields of transportation. The first section deals with gaps in transportation research, and the second with transportation research studies under way. It shows the specific projects and who is working on them and where.

"It should be made clear," George P. Baker, TAA president says in an introduction, "that the TAA board of directors takes no position as to the desirability of each or any of these suggested studies. From time to time the board will probably wish to single out certain areas and stress its belief in the special need for research in those areas. It is not its desire that such research be carried on by the association."

FROM THE MANUFACTURERS

BULLETIN 460. 16 pages. Illustrations. Vapor Heating Corporation, Dept. RA, 6420 West Howard st., Chicago 31, Ill. Free.

Describes the two models—stationary and caboose—of Vapor's Caban heater. Illustrated with cut-away pictures and drawings, the bulletin highlights the many features and the economy of Caban's operation.

•

BULLETIN NO. 1008-W. 4 pages, illustrations, drawings, charts. Automatic Transportation Company, Dept. RA, 101 West 87th st., Chicago 20, Ill. Free.

Automatic Transportation Company's bulletin gives specifications and drawings of the firm's mow lift pallet Transporter, walkie-type electronic-driven industrial truck, Model WPY 4 and 6.

•

HOW "ROLLER FREIGHT" CAN SAVE AMERICA'S RAILROADS $224,000,000 A YEAR. 32 pages, illustrations. The Timken Roller Bearing Co., Dept RA, Canton 6, Ohio. Free.

Lists and explains five big savings "roller freight" can give the railroads—namely eliminate the hot box problem; cut terminal bearing inspection time; cut cost of lubricant; reduce cost of maintaining and replacing parts; and reduce the cost of periodic routine inspection. Several other savings are also listed, and a brief explanation of the planned conversion system is included.

•

THE SWITCH TO HIGHER PROFIT. 8 pages, color, illustrations. Caterpillar Tractor Company, Peoria, Ill. Booklet available from dealers or from Advertising Division, at Peoria.

Caterpillar's new brochure illustrates uses of Cat diesel engines in the railroad field. Explanations are given on how the power units can be fitted to varied operations, including crane power, air conditioning and locomotive prime power.

•

MOVING MOUNTAINS. 27-min., 16mm., color, sound film. Community and Industrial Relations Department, Clark Equipment Company, Dept. RA, Buchanan, Mich. Available on loan.

The film dramatizes the role mobile materials handling equipment has played in freeing man from drudgery and toil. It opens with scenes depicting life in ancient Egypt, with slaves performing the back-breaking tasks of constructing aqueducts, buildings and pyramids by hand. It tells the story of man's hard physical labors through the centuries to the present, when the development of mobile machines to handle products and materials more efficiently has made possible a shorter, easier day and more rewarding pay scales for all working people.

BOOKS

MAINTENANCE OF WAY EMPLOYMENT ON U.S. RAILROADS, by William Haber, John J. Carroll, Mark L. Kahn, and Merton J. Peck. 237 pages, tables, charts. Brotherhood of Maintenance of Way Employees, 12050 Woodward ave., Detroit 3.

In 1956 the Brotherhood invited Dr. William Haber and his colleagues to make an analysis, "for the benefit of employer and employee alike," of the instability of maintenance of way employment on railroads in the United States. This report, the result of that study, outlines the nature of employment instability in maintenance of way operations, and surveys alternative methods which might be pursued to lessen the burden borne by employees because of these conditions. Chapters cover a summary of the problem; long-run employment trends; cyclical fluctuations in maintenance of way employment; seasonal variations in employment; the human impact of instability; current protection for displaced employees; adjusting to technological change; minimizing cyclical and seasonal fluctuations; and findings and recommendations.

President T. C. Carroll of the Brotherhood states in a forward that the organization at no time sought to "control the scope, content or direction" of the study. Instead, its expectation was "a completely independent and objective diagnosis" by the authors.

•

TALK THAT GETS RESULTS: COMMUNICATION—KEY TO SUCCESS AND HARMONY WITH OTHERS, by K. C. Ingram. 230 pages. McGraw-Hill Book Company, 330 W. 42nd st., New York 36. $3.95.

Mr. Ingram, who, until his retirement in 1955, was assistant to the president of the Southern Pacific, in charge of public and employee relations, blueprints the way to a happier, more rewarding life through better communications with friends, family and business associates. He gives tested methods which show how to get ideas across, how to understand people and the drives that motivate them. He explains why it is unreasonable to expect people to be reasonable, how to disagree agreeably, how to use the power of suggestion in persuading others, how to recognize and use the basic human drives that influence people, how to be a good listener, and much more clear, practical advice. This is also a book about words and their importance as tools of communication.

•

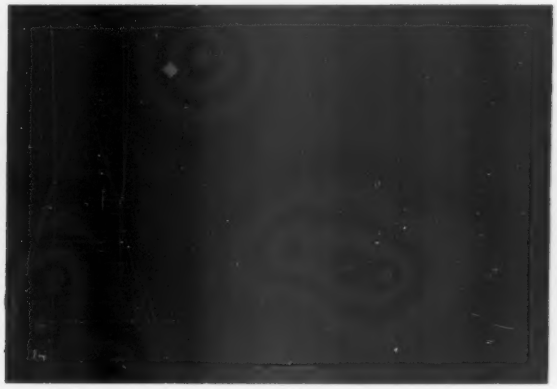
PB 111996-R, A SECOND SURVEY OF DOMESTIC ELECTRONIC DIGITAL COMPUTING SYSTEMS. 439 pages, illustrations, comparative tables, bibliography, glossary. Available from the Office of Technical Services, U.S. Department of Commerce, Washington 25, D.C. $7.

Engineering and programming characteristics of 103 commercially available electronic digital computer systems are surveyed in this report. Data is provided for applications, cost, personnel requirements and power and space requirements for specific systems. Suggestions are included on modifications and improvements useful to present operators of digital systems. Reliability problems are also covered.

Newest safety signing system... Reflective Train Control

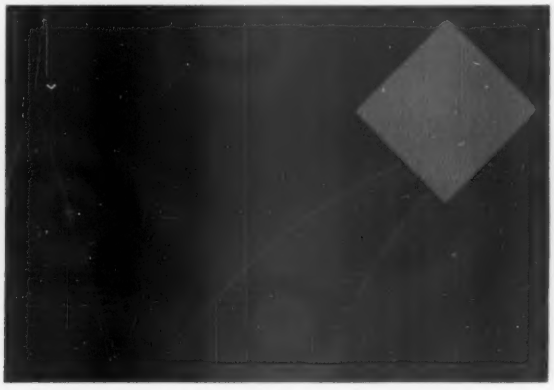
(And how it works to give you low-cost nighttime safety)

The diesel moves at high speed through the night. Any dangers ahead are hidden by darkness. Then the headlamp picks up a dot of green about ½ mile ahead . . . just about where that siding switch comes in. The engineer's concentrated attention is focused on the bright dot ahead.



The dot quickly grows larger. It is the switch target. Its diamond shape and clear green color tell the engineer the switch is right . . . gives him an easy-to-see, go-ahead signal. If the switch had been open, the red side of the sign would have been seen just as easily . . . in time for the alerted engineer to act.

Almost safely past the switch now, the engineer already sees a new dot ahead. This is the Reflective Train Control system, RTC, a 24-hour-a-day signing system of "Scotchlite" Reflective Sheeting. These durable signs (made quickly and economically in a central sign shop) actually pay for themselves in lowered maintenance costs.



The green diamond flashes past. The switch is crossed safely. The fast-moving train moves smoothly ahead. And the bright warning of durable signs of "Scotchlite" Sheeting, reflected in the diesel headlamp, has again proved its value. In any weather, RTC with "Scotchlite" Sheeting gives your road *true* low-cost nighttime safety.

Reflective Train Control can give *your* road improved operational safety and lower sign production and maintenance costs. Write today to: Minnesota Mining & Mfg. Co., Dept. FQ-1147, St. Paul 6, Minnesota, for full details.

WIDE ANGLE FLAT-TOP®

REG. U. S. PAT. OFF.

SCOTCHLITE

BRAND

REFLECTIVE SHEETING

PRODUCT OF 3M COMPANY RESEARCH

The terms "Scotchlite" and "Flat-Top" are registered trademarks of Minnesota Mining & Mfg. Co., St. Paul 6, Minn. General Export: 99 Park Avenue, New York 16, New York. In Canada: P. O. Box 757, London, Ontario.

Studs for NELWELD process machined from Youngstown cold finished bars

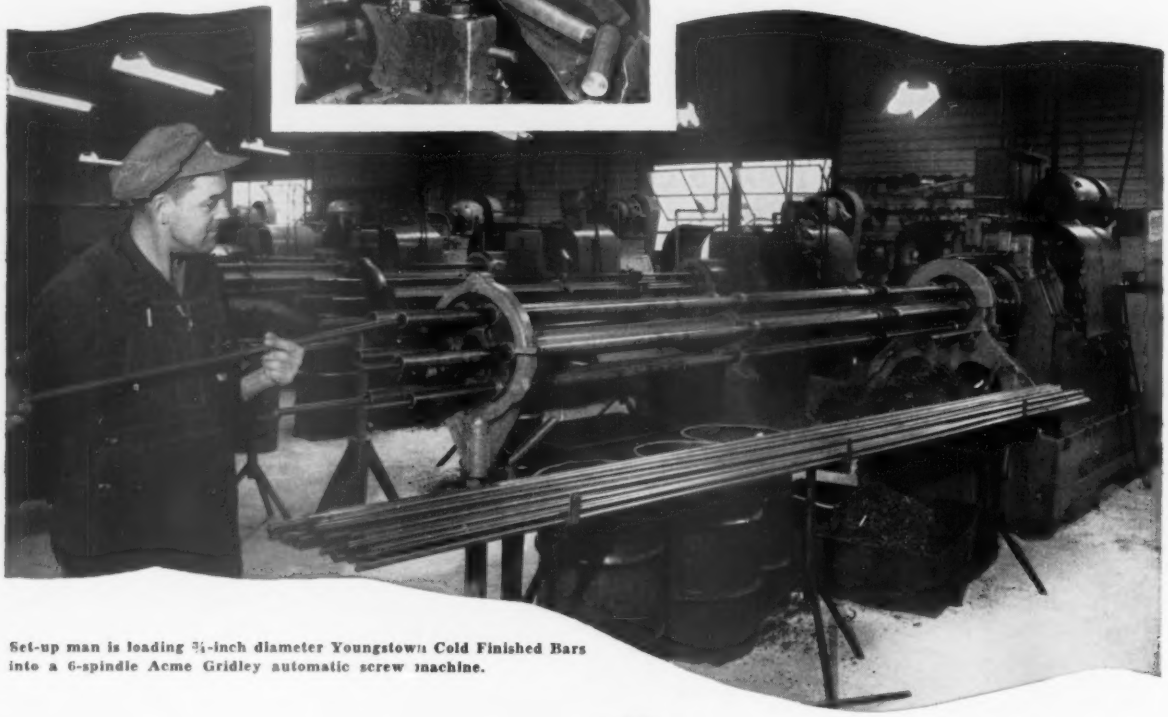
Progressive fabricators rely on the Nelweld method for fast, dependable end-welding of studs to steel surfaces. This novel electric arc process—utilizing flux-filled steel studs—substantially reduces direct fastening costs when used to replace conventional time-consuming methods such as drilling, tapping, hard welding, through-bolting or the securing of straps and rivets.

To maintain their world-wide reputation for product quality and uniformity, Nelson Stud Welding, a division of Gregory Industries, Inc., uses Youngstown Cold Finished Bars as the basic material for stud production.

Youngstown Cold Finished Bars provide high machinability and greater uniformity of composition, structure and surface finish to help you increase production of more uniform parts. Always specify Youngstown—it's your best assurance of quality.

Why not call or write your nearest Youngstown District Sales Office today for additional information or metallurgical assistance?

Close-up of studs being bored to accomodate their charge of flux (top collet) and then cut-off (center collet). Two finished Nelweld studs, shown in the pan in foreground, were machined simultaneously in the 6-position machine. First operation—feed out and face; second—bore; and third—cut-off.



Set-up man is loading 3¼-inch diameter Youngstown Cold Finished Bars into a 6-spindle Acme Gridley automatic screw machine.

THE YOUNGSTOWN SHEET AND TUBE COMPANY
Manufacturers of Carbon, Alloy and Yoloy Steel
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Cold finished bars

MARKET OUTLOOK *at a glance*

Carloadings Dip 3.2% Below Previous Week's

Loadings of revenue freight in the week ended October 26 totaled 703,688 cars, the Association of American Railroads announced on October 31. This was a decrease of 23,124 cars, or 3.2%, compared with the previous week; a decrease of 113,115 cars, or 13.8%, compared with the corresponding week last year; and a decrease of 125,960 cars, or 15.2%, compared with the equivalent 1955 week.

Loadings of revenue freight for the week ended October 19 totaled 726,812 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, October 19

District	1957	1956	1955
Eastern	108,648	130,688	128,161
Alleghany	136,535	156,471	154,709
Pocahontas	61,817	67,391	62,211
Southern	124,624	133,222	135,825
Northwestern	117,031	139,431	140,791
Central Western	126,875	141,057	144,100
Southwestern	51,282	60,481	63,281
Total Western Districts	295,188	340,969	348,172
Total All Roads	726,812	828,741	829,078
Commodities:			
Grain and grain products	51,260	56,406	58,356
Livestock	13,468	15,333	15,352
Coal	135,147	148,819	133,290
Coke	9,861	12,096	13,306
Forest Products	38,362	45,672	46,512
Ore	68,827	87,752	80,942
Merchandise l.c.l.	54,372	61,886	65,106
Miscellaneous	355,515	400,777	416,214
October 19	726,812	828,741	829,078
October 12	741,520	823,207	821,578
October 5	747,647	815,193	801,559
September 28	739,266	831,648	815,535
September 21	724,934	822,436	813,720
Cumulative total, 42 weeks	29,352,190	30,647,271	30,379,587

IN CANADA.—Carloadings for the seven-day period ended October 14 totaled 76,014 cars, compared with 86,767 cars for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
October 14, 1957	76,014	27,093
October 14, 1956	83,311	33,168
Cumulative Totals:		
October 14, 1957	3,205,657	1,302,646
October 14, 1956	3,486,892	1,367,144

New Equipment

PASSENGER-TRAIN CARS

► *Chicago & North Western.*—Ordered 13 cars of new "bi-level" design from Pullman-Standard at cost of $2,500,000; included are 10 coaches, one parlor car, one coach-parlor car and one coach-bar-lounge car; delivery is scheduled for next summer (see p. 58).

LOCOMOTIVES

► *Ecuador to Buy Diesels Here.*—Based on findings that immediate dieselization of Ecuadoran State Railways is practicable and necessary, studies are being made in preparation for submitting an application for a loan of about $3,000,000 to Export-Import Bank or International Bank for Reconstruction and Development; money will be used to purchase diesel-electric locomotive units in the U.S., says Foreign Commerce Weekly.

Maintenance Expenditures

► *Up 3% in August.*—Expenditures by Class I roads for maintenance of equipment, way and structures in August were up $8.2 million, compared with the same month last year, according to report of ICC Bureau of Transport Economics and Statistics summarized below:

	August '57	August '56	% Increase
Maintenance of Way & Structures	$125,882,268	$122,166,964	3.0
Maintenance of Equipment	159,427,871	154,923,174	2.9
Totals	285,310,139	277,090,138	3.0

New Facilities

► *Chicago & North Western.*—Added third track to TOFC loading facilities at 40th Street yard, Chicago, to handle expanding north- and westbound piggyback operations.

► *Illinois Central.*—Started constructing addition to 310-bed IC Hospital in Chicago; new wing, to be completed by late fall at cost of $750,000, will provide four air conditioned operating rooms, nurses' work room, patients' recovery room and four-bed ward; other work at hospital includes installation of 90,000-cu ft liquid oxygen storage tank, piping of oxygen and vacuum system to bedside in all patient rooms, and installation of new heating plant to operate with either gas or fuel oil.

► *New York City Transit Authority.*—Purchased its third wheel truing machine from Standard Railway Equipment Manufacturing Company; new machine and one bought earlier in 1957 will be used in Grand Concourse shops; another machine, already delivered, will be installed in Coney Island shop.

► *Northern Pacific.*—Will convert stationary power plants at larger terminals from coal-burning to gas or other substitute fuel; major projects underway include conversions of plants at Livingston, Mont. (estimated cost $75,000), Glendive ($36,000), and Laurel ($54,000); program will be continued in 1958 with conversion of nine Minnesota plants to gas (with liquid fuel for standby), or lignite.

a RAILWAY AGE time-saver page

(*Continued from page* 10)
they "heard objects striking the bottoms of the cars and saw ballast flying."

Examination of the track structure after the accident disclosed that a "considerable" number of ties had been struck by flying tie plates throughout a distance of about 1,000 ft westward from the point where the first of the plates was piled. In the same general area, 142 damaged plates were found either between the rails or outside the rails. There were no marks of dragging equipment east of the point where the first tie was struck.

Inspection of the equipment disclosed that the locomotive and first two cars were not damaged, but the floors, air brake equipment, piping and other appurtenances below the floor level of all the other cars were damaged in varying degrees by the tieplates. On the east end of the eighth car, which became uncoupled from the ninth car, the coupler rotary lock-lift assembly had been struck on the bottom, the eye where the uncoupling lever connected was broken off, and the lock-lift assembly was operated allowing the coupler to open.

A preceding westbound train had passed Acomita about 50 min. before the accident, but after the tie plates had been placed. Members of that train's crew noted no unusual conditions. "Apparently," the commission said, "a tie plate worked over toward the north rail and was dislodged and set in motion under the third car of No. 21 as that train was passing. After the first tie plate was struck it struck other tie plates which had been placed between the rails causing them in turn to be set in motion and to be struck by the train."

New 'Bi-Levels' Ordered by C&NW

Road announces $2.5-million purchase of 13 new-type passenger cars to be built by Pullman-Standard; units will set pattern for passenger trains of the future, says C&NW President Fitzpatrick.

A new breed is being added to the passenger-car stable by the Chicago & North Western and the Pullman-Standard Car Manufacturing Company.

Thirteen cars of what the C&NW calls "bi-level" design have been ordered from Pullman-Standard, Clyde J. Fitzpatrick, North Western president, announced last week. The cars, similar in basic arrangement to suburban gallery cars but fitted out for through main line service, will cost $2,500,000. Included are 10 coaches, a full parlor car, a coach-parlor car and a coach-bar-lounge car.

With the exception of air brakes and certain pneumatic features, the cars, to be delivered next summer, will be entirely electrically operated. Steam generators on certain existing diesel locomotives will be replaced with alternating-current generators which will heat the train, provide current for lighting, and operate sealed package air-conditioning units in each car. An electric signal circuit will replace the air-operated signal used in conventional cars.

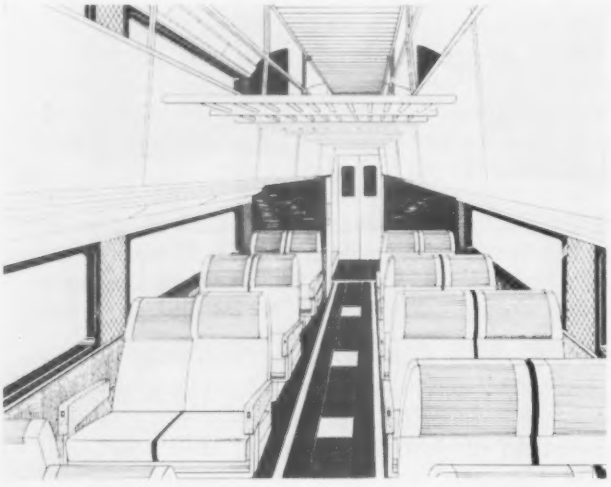
The 10 coaches each will seat 96 passengers, with double seats downstairs and singles in the galleries. The parlor car will provide 60 seats compared with 25 for a standard parlor car. The coach-parlor car will seat 30 parlor-car passengers in one section and 48 coach passengers in another section. High seating capacity and lack of generators, compressors, fuel tanks and other underbody equipment will give the coaches a 40% saving in weight per seat over the North Western's present "400" coaches.

To fill out the two new trains into which the cars will go, Pullman-Standard will "completely remanufacture" two existing dining cars, a baggage-tap car and an RPO-baggage-tap car to conform outwardly to the "bi-level" design. The cars will, however, retain their single-floor level. The "bi-level" cars will be 85 ft long and 15 ft 10 in. high.

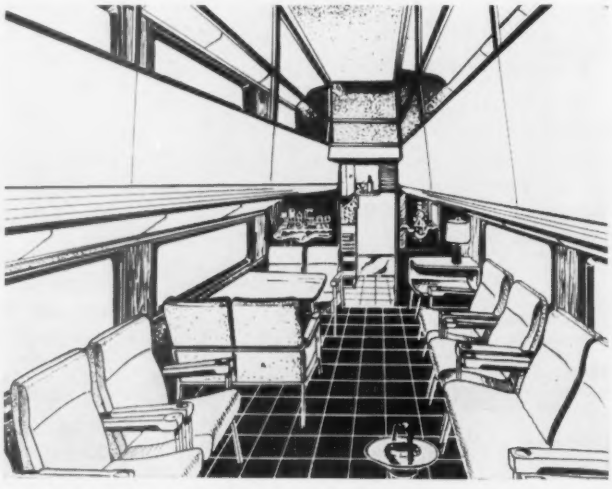
"The substantial investment we are making in this new equipment is the direct result of action taken earlier this year by the Wisconsin Public Service Commission in permitting us to eliminate a number of unnecessary and unprofitable passenger trains in the state," Mr. Fitzpatrick said.

"By reducing some of our passenger-train losses, we are able to take positive steps to improve the remaining services where sufficient public use is demonstrated." In campaigning for what resulted in the removal of 14 trains, the North Western promised to buy a pair of new trains "of the latest type" to show that it wasn't attempting to back out of the passenger business altogether (Railway Age, June 17, p. 16).

The cars—13 new and 4 rebuilt—will



BI-LEVEL COACH, of which 10 are included in C&NW order, will seat 96. Car will be decorated in plastics, synthetic materials and bright metals.



BI-LEVEL LOUNGE also will be included in order. Lounge will occupy half of car, with coach space convertible to lounge facilities in other half.

be divided into two trains. One will replace the "Shoreland 400" and the "Valley 400" between Chicago, Milwaukee and Green Bay, serving both Fox River Valley communities and those along Lake Michigan. The other will replace the "Peninsula 400" between Chicago, Milwaukee, Green Bay and upper Michigan points. This train is the road's most heavily traveled streamliner in summer months.

Cars released will be used to upgrade other trains, eliminating virtually all non-streamlined cars in through service, Mr. Fitzpatrick said.

"While this new equipment is a definite departure from the conventional, it permits us to utilize fully an inherent advantage: the ability to provide mass transportation with a high degree of passenger comfort," he explained. "The designs stem from a year of study of all existing types of railroad passenger equipment, including the latest experimental lightweight trains."

Greater and more comfortable seating capacity than is possible in conventional equipment is the goal of the "bi-level" design. The North Western expects the cars to be quieter because they won't contain engine-generator sets, and more comfortable because they'll have electric heating controls. "We believe that in this bi-level design we are setting the pattern for passenger trains of the future," Mr. Fitzpatrick declared.

Wide use will be made of aluminum, stainless steel, plastics and synthetic materials. The coach section of the coach-lounge car will be easily convertible to additional lounge space. All doors will be pneumatically controlled.

'Dream Bus' Competitor Of IC Calls It Quits

A commuter's "dream bus," chartered since last spring by a Chicago suburban commuters group, was scheduled out of service November 1.

The reason—the bus, complete with air conditioning, carpeted floor, reclining seats, TV and a hostess serving coffee and soft drinks, could count only 17 steady patrons.

Commuters, apparently, preferred the faster and more economical—though somewhat more spartan—Illinois Central. IC makes the 27½-mile suburban run in about 48 minutes, charges a commuter $20.18 for a 46-ride ticket. The bus, according to a schedule announced at the start of service, covered the route in 80 minutes northbound and 75 minutes southbound, cost riders $29.40 per month for the round-trip into Chicago's Loop.

SP Will Drop Its Bay Ferryboats

Southern Pacific plans to substitute bus service for the venerable San Francisco Bay ferryboat operation which has shrunk to a three-boat proposition in recent years.

Decline in rail passenger travel, combined with prohibitive costs of maintaining the boats, were cited as the factors behind the switch to bus transportation. Claude E. Peterson, SP vice-president of passenger traffic and public relations, said the road will apply to the Interstate Commerce Commission for permission to discontinue ferry service and substitute buses to carry rail passengers between San Francisco's Ferry Building and trains terminating in Oakland.

First of the last three boats to go was the 'Eureka," once called the "floating palace" of bay ferryboats. The boat was presented to the San Francisco Maritime Museum, which plans to display "Eureka" as a floating monument to the old ferryboat days in its "Project X" transportation museum development at Aquatic Park. The other two ferries—"San Leandro" and "Berkeley"—will probably be continued in service until ICC approval is received.

The substitute bus service will operate on a more flexible schedule than that permitted by boat operation. Mail, baggage and express will be trucked between San Francisco and Oakland, thus speeding straight passenger service.

C&NW Centralizes Car Repairs

Freight car repairs once conducted at 14 different locations have been consolidated by the Chicago & North Western into one 32-acre shop area.

C&NW expects the $6,000.000 project, at Clinton, Iowa, to pay off in economic and operational advantages of all-year repair and construction work, with full utilization of assembly line techniques and mechanization.

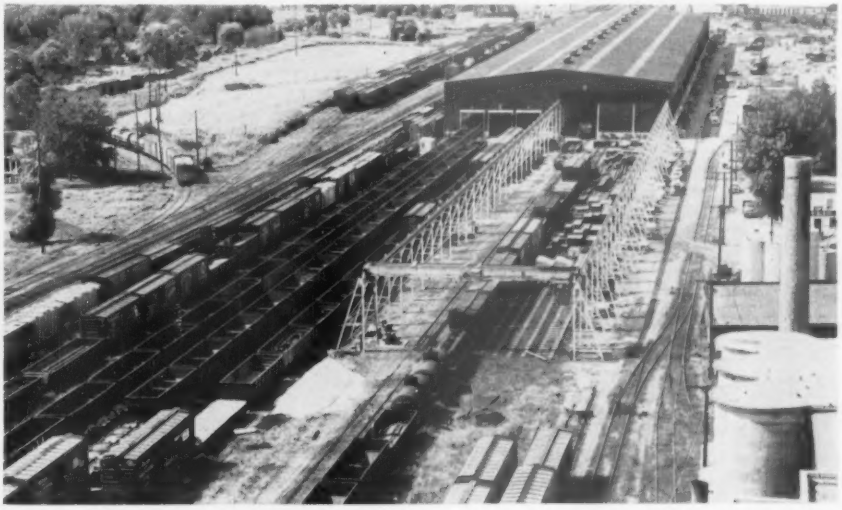
Clinton Car Shop, designed to handle heavy repairs on 7,000 cars a year, came into being as a follow-up to C&NW's complete dieselization and consolidation of diesel repair facilities in Chicago. Several existing buildings at Clinton (formerly used for locomotive repairs), were made available for car repairs, and construction of an erecting-fabricating shop and paint shop, coupled with extensive track changes, gave the road its centralized car shop facilities.

In addition to its heavy repair role, Clinton is also set up for construction of 1,000 new cars a year. Under full production, the shop will employ about 500 men. Some 350 men are now on the shop force, pending completion of all facilities.

In operation, the erecting and fabricating shop can handle 60 cars at one time; the nearby paint shop can take 24 cars and will have a maximum output of about 40 cars a day. Cars move through the main shop from east to west, move on to the paint shop under power of electric car pullers (hoists obtained from now dismantled coal chutes), and finally are weighed and stenciled before being returned to service.

Other facilities at Clinton include a wheel shop (production, 40,000 sets of wheels a year), air brake and accessory shop, office building, power house, welfare building, fuel and oil supply house and acetylene generating plant. In the wheel shop, axles are moved to and from presses and lathes via completely automatic conveyor lines.

An additional factor in the Clinton operations is the intensive materials handling program set in motion to supply and handle the more than 9,000 different items required by the shops. C&NW is working with suppliers to obtain shipments in unitized loads; items such as welding rods, car springs, journal box lids and lubricator pads are being palletized for fork lift handling. For the first time, C&NW is receiving all lumber in banded units for mechanical unloading, which has cut from 48 hours to two hours the time required for unloading a car.



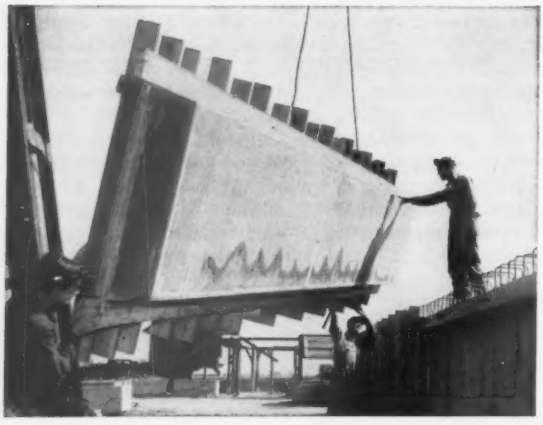
GENERAL VIEW of C&NW's new Clinton car shop shows erecting and fabricating building and material storage area. Paint shop is to the rear of the main shop building. Tracks at left are the road's Chicago-Omaha main line.

DURABLE

The success of 575 freight cars rehabilitated with fir plywood in 1944 prompted Great Northern Railway officials to specify plywood again in 1955—because this 10-year test proved fir plywood more durable; it maintained its appearance longer. Panels cut handling time, reduce re-framing cost, give added strength. In photo, workmen spray moisture repellent on the new plywood lining.

STRONG

Consolidated Freightways, Portland, Oregon, uses fir plywood to line the interior of trucks and trailers. Shown here is a special bulkhead, developed by the firm, to permit mixed shipments of refrigerated and non-refrigerated goods in the same trailer. It consists of two 5/8" Exterior-type panels, hinged, and edged with a rubber boundary to seal off area when bulkhead is in place.



VERSATILE

Pre-stressed, post-tension, and reinforced concrete beams are formed against high-density overlaid fir plywood by Concrete Engineering Company, Tacoma, Washington. The panels are used because extra smooth concrete surface is obtained, and because a great many re-uses of the forms are possible. Fir plywood cuts costs, gives superior results on *any* concrete form job.

DFPA® TESTED QUALITY

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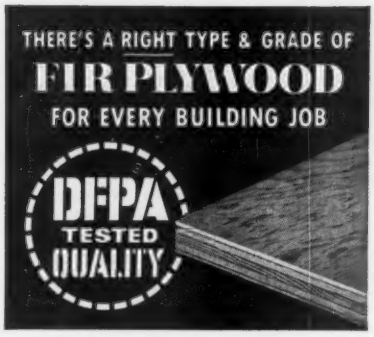

1. SPECIFY BY DFPA QUALITY TRADEMARKS

DFPA grade-trademarks appear only on plywood manufactured, inspected and scientifically tested under the DFPA quality control program. DFPA, Douglas Fir Plywood Association, is a non-profit industry organization devoted to product research, promotion and quality maintenance.

2. CHOOSE THE RIGHT GRADE FOR EACH JOB

Fir plywood comes in two types: 1. *Exterior* (waterproof glue for permanent exposure to water or weather); 2. *Interior* (moisture-resistant glue) for indoor uses, crating, sheathing, maintenance. Within each type are several grades – i.e., panels with one good side, two good sides. Most popular grades are shown below.

EXT-DFPA — Exterior plywood for permanent outdoor uses

PlyPanel® for paneling, most indoor uses

PlyScord® is unsanded panel for sheathing, crating, bins, etc.

PlyForm® concrete form grades come in Exterior and Interior types.

SPECIALTY PANELS include 1. *Overlaid Exterior plywood* (hard, smooth, abrasion-resistant fused resin-fiber surfaces) for siding, signs, tanks, concrete forms; 2. *Textured panels* with smart grooved, brushed or striated surfaces for fixtures, siding, special decorative effects.

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Technical Tidings

Selected from November Railway Monthlies

Old locomotives can be made better than new when the time comes for major rebuilding. Two Westinghouse Electric engineers explain refinements and new materials which enable electrical and mechanical equipment to be rebuilt so that it can outperform its original design. Details are reported in Railway Locomotives and Cars.

•

Annual return of 19% is being realized by the Central Vermont from new yard interlockings at St. Albans, Vt. A detailed breakdown of the costs and savings, as well as a description of how local signal department employees installed the interlockings, is presented in Railway Signaling and Communications.

•

The three types of diesel-driven pile hammers now on the market are described in detail in Railway Track & Structures. The article, which also discusses recent advances in air and steam hammers, is the first of a two-part series on developments in pile-driving equipment.

•

The Union Pacific can turn its "name" passenger trains faster at the ends of their runs because it has mechanized the testing of air brakes. The equipment and procedures are explained in Railway Locomotives and Cars.

•

Retarders and power switches are saving car time and reducing operating expenses at the Chesapeake & Ohio's Newport News, Va., coal pier. Railway Signaling & Communications describes the new installation and the modern communications installed to coordinate the coal dumping operation.

•

Using a special car the Western Pacific estimates it is cutting about 8.6 cents per tie off the cost of distributing new crossties to be inserted in track. Main feature of car, as described in Railway Track & Structures, consists of side stakes hinged at the top so they swing out at bottom.

•

Method to prevent damage to box-car ends has been jointly developed by the Union Pacific and Standard Railway Equipment. The reinforced lining they have produced is a combination of metal and vertical wood strips. It has proved damage resistant. Construction details are given in Railway Locomotives and Cars.

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Strictly stag — is this all male haven for good drinks, good food and good talk. Plus sports events on TV.

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Pause — in the relaxing, informal atmosphere of the gayly decorated Patio. It's a Cleveland habit to say — "Meet me at the Patio."

Coffee Shop
Service is brisk and decor cheerful in the modern, air-conditioned coffee shop. Enjoy a tasty sandwich or a moderately priced meal.

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CLEVELAND, OHIO

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People in the News

BESSEMER & LAKE ERIE.—**R. B. Krichbaum** appointed assistant to traffic manager, Pittsburgh, Pa., Position of industrial agent, traffic department, formerly held by Mr. Krichbaum, abolished.

CENTRAL OF GEORGIA.—**Simon Fogarty, Jr.,** acting division engineer, Savannah division, Savannah, Ga., appointed division engineer of that division, succeeding **R. H. Gilkey,** retired.

John E. Lanier, assistant general storekeeper, Macon, Ga., promoted to general storekeeper there, succeeding **James R. Beach,** whose appointment as purchasing agent at Savannah was noted in Railway Age, Sept. 16, p. 78.

CHESAPEAKE & OHIO.—**Erle T. Rucker,** assistant regional manager, Northern region, Detroit, appointed manager of that region, succeeding **Carl J. Millikin,** who retired September 30. **B. G. Nash,** superintendent, Grand Rapids, Mich., succeeds Mr. Rucker. **P. E. Brammer,** assistant superintendent — trainmaster, Peru, Ind., replaces Mr. Nash. **T. W. Grose,** assistant superintendent, Ashland, Ky., succeeds Mr. Brammer and is succeeded by **F. R. Lutz,** trainmaster, Handley, W. Va. **J. B. Regan** replaces Mr. Lutz. **P. L. Koehler** appointed superintendent Covington, Ky., succeeding **R. N. Lynch,** transferred to Columbus, Ohio, succeeding **O. K. Lawson,** promoted. **R. H. Abbott,** division engineer, Richmond, Va., named assistant superintendent, Clifton Forge, Va. **W. H. Hussey** appointed assistant superintendent merchandise piers, Newport News, Va.

Jurisdiction of **W. J. Melvin,** chief special agent, extended to include Northern region (system jurisdiction), headquarters remaining at Richmond.

H. A. Moffitt, superintendent station service and freight claim prevention, Huntington, retired October 1. **S. H. Pulliam,** assistant to vice-president—operations, named manager station service and freight claim prevention, Huntington. **A. W. Peterson,** superintendent station service and freight claim prevention, Detroit, appointed assistant manager station service and freight claim prevention, Huntington. **F. M. Walters,** freight service supervisor, Detroit, named general freight service supervisor, Grand Rapids. **H. C. Propst,** supervisor merchandise service, Huntington, becomes assistant to manager station service and freight claim prevention at that point.

C. L. Spittler appointed assistant general auditor—staff, Detroit. **R. E. Mrava** appointed assistant to general auditor-operations accounting, Cleveland.

John W. Hanifin appointed general commerce attorney; **Robert H. Pratt** named assistant general solicitor and **Richard T. Wilson, Jr.,** appointed assistant to general solicitor, all at Richmond, Va.

FRISCO.—**D. L. Walker** appointed standards engineer, Springfield, Mo.

J. W. Dollar appointed supervisor freight loss and damage prevention, Springfield, Mo.

Alex W. Arnett, general passenger agent, St. Louis, appointed passenger traffic manager there, succeeding **M. Dudley Riggs,** who retired November 1 after 42 years' railroad service.

G. E. Head, district manager-sales, San Francisco, promoted to regional manager-sales, to succeed **Frank R. Coulter,** named vice-president, New York. Mr. Head's successor is **H. C. Prendergast,** assistant district manager-sales.

GREAT NORTHERN.—**Richard M. O'Kelly,** assistant secretary and assistant treasurer, St. Paul, Minn., elected secretary and treasurer, succeeding **Frederic L. Paetzold,** who retired October 31 after 44 years' service.

INTERSTATE COMMERCE COMMISSION.—**Vernon V. Baker** appointed director, Bureau of Finance, Washington, D.C. Mr. Baker had been acting director of the bureau since the retirement of **Roger T. Boyden** August 1.

Robert Newel, chairman, Fourth Section Board, appointed assistant director, Bureau of Traffic. **Paul W. Coffey,** member, Fourth Section Board, succeeds Mr. Newel as chairman.

NEW YORK CENTRAL.—**Charles B. Fleming,** superintendent, Syracuse and Rochester divisions, Syracuse, N.Y., transferred to the River and New York Terminal divisions and marine department at Weehawken, N.J., succeeding **Herbert B. Tucker,** retired.

T. E. Jordan appointed district methods engineer, Indianapolis, Ind., succeeding **R. F. Lawson,** appointed assistant district engineer, Western district, Cleveland, Ohio, replacing **C. C. Herrick,** promoted.

Henry F. McCarthy, who resigned October 7 as president of **Seatrain Lines,** New York, named assistant vice-president—purchases, NYC, New York, effective November 15.

George T. Magee, assistant freight sales manager, St. Louis, appointed freight sales manager there, succeeding **LeRoy C. Howe,** retired. **Carl J. Hucabee,** district freight sales manager, St. Louis, named assistant freight sales manager there. **I. Jack Bader,** district freight sales manager, Evansville, Ind., named district freight sales manager, St. Louis. **Ralph N. Cramer,** district freight sales manager, Indianapolis, succeeds Mr. Bader. **Jack W. Ringwood,** district freight saleman, Jacksonville, Fla., replaces Mr. Cramer at Indianapolis.

Dr. R. A. Johnson appointed medical director, Detroit, succeeding **Dr. Charles H. O'Donnell,** resigned.

Gordon E. Bradfield, stores control supervisor, New York, appointed district storekeeper, New York.

Benjamin J. Gordon, materials engineer, New York, appointed assistant district engineer, Syracuse, N.Y.

Charles L. Stalder, superintendent personnel, Cleveland, named assistant general manager labor relations there.

Lawrence G. Kimbrough, district supervisor of contracts, Detroit, named executive assistant to general manager, Detroit. **Malcolm V. McCann,** contact investigator, Detroit, succeeds Mr. Kimbrough.

Robert L. Weaver, general yardmaster, Niles, Mich., named trainmaster there. **Harold W. Collins,** assistant trainmaster, Argo, Ill., appointed trainmaster there.

Joseph M. Ian, manager of insurance, New York, appointed assistant director real estate—special projects at that point. **William J. Cone,** engineer assistant, Indianapolis, named real estate engineer, Cincinnati.

PENNSYLVANIA.—**Robert R. Artz,** assistant general solicitor, Philadelphia, appointed assistant general counsel. **Robert M. Johnson** and **Harris J. Latta, Jr.,** assistant solicitors, advanced to assistant general solicitors. **Arthur L. Foster,** assistant to general claims agent, and **Donald M. Tolmie,** assistant solicitor, appointed assistant general solicitors, Chicago.

Leo J. Moran, district sales manager, Cleveland, appointed manager of freight sales and services, Northern region, Buffalo, N.Y., succeeding **Daniel J. Moynihan,** transferred to Baltimore.

P. I. Harclerode appointed master mechanic, office of superintendent-equipment, Northwestern region, Fort Wayne, Ind.

William F. Hoagland, manager of freight sales and services, Chesapeake region, Baltimore, Md., transferred to New York region in similar capacity.

RAILWAY EXPRESS AGENCY.—**John J. Boylan,** superintendent, Western Illinois—Eastern Iowa division, Chicago, retired October 31.

Thomas F. Farris, Jr., assistant to director, sales, New York, appointed assistant eastern sales manager, Philadelphia, Pa.

READING.—**Harry B. Gauntt,** chief of yards and terminals, named superintendent, Philadelphia division, Philadelphia, succeeding the late **Albert R. Nice, Jr. Elbert T. DeWitt,** assistant superintendent, Philadelphia division, succeeds Mr. Gauntt. **Earl T. Hunter,** general rules examiner, Reading, replaces Mr. DeWitt.

SANTA FE.—**A. B. Gibson** appointed foreign freight agent, Los Angeles, Cal., succeeding **C. E. Engstrom,** resigned. **Arthur A. Moser,** assistant general freight agent, San Francisco, transferred to Los Angeles, succeeding **F. J. Wright,** whose promotion to general freight agent at Chicago was noted in Railway Age, Sept. 30, p. 46.

SOO LINE.—**K. J. Sherwood** appointed director-traffic research, Minneapolis, Minn. **D. M. Knox** succeeds Mr. Sherwood as assistant general rate manager, Chicago. Position of manager-rates, Minneapolis, formerly held by Mr. Knox, abolished. **R. F. Day** appointed assistant manager-rates, Minneapolis.

SPOKANE INTERNATIONAL.—**Theodore A. Goody** appointed traffic manager, Spokane, Wash., succeeding the late **O. Richter.**

TRANSPORTATION COUNCIL FOR U. S. DEPARTMENT OF COMMERCE.—**J. W. Harnach,** general traffic manager, Cooperative Grange League Federation Exchange, Ithaca, N.Y., has been elected chairman, succeeding **Charles H. Beard,** general traffic manager, Union Carbide Corporation, New York.

UNION PACIFIC.—**J. M. Bates,** division engineer, Kansas division, Kansas City, Mo., appointed assistant to the chief engineer, Omaha, and is succeeded by **E. M. Chalk,** industrial engineer, Kansas City.

Alex W. Arnett
Frisco

Richard M. O'Kelly
GN

Henry F. McCarthy
NYC

Harry B. Gauntt
Reading

OBITUARY

Albert R. Nice, Jr., superintendent, Philadelphia division, **Reading,** died October 8.

Anderson Pace, 72, retired general industrial agent, **Illinois Central,** died October 20 in Evanston Hospital, Evanston, Ill.

ADVERTISERS

American Car and Foundry Division of ACF Industries, Inc. 48-49
Bethlehem Steel Company 3
Buffalo Brake Beam Company 36-37
Chicago Railway Equipment Company 18
Chipman Chemical Company 26
Classified Advertisements 63
Diesel Reclamation Service Company 52
Douglas Fir Plywood Association 60-61
Edgewater Steel Company 4
Erman-Howell Division 63
Evans Products Company 44
Fairbanks-Morse & Company 29
General Railway Signal Company ..... Back Cover
General Steel Castings 11
Gould-National Batteries, Inc. 45
Hotel Cleveland 61
Hunt Company, Robert W. 63
Hyatt Bearings Division of General Motors Corporation ..... 13-16 incl.
Iron & Steel Products, Inc. 63
Jackson Vibrators, Inc. 6
Linde Company, Division of Union Carbide Corporation 17
Machinery & Steel Division 63
Magnus Metal Corporation 8
Minnesota Mining & Manufacturing Company 55
Orton Crane & Shovel Company 53
Portland Cement Association 39
Pullman-Standard Car Manufacturing Company ... 27-28
Railway Educational Bureau, The 63
Railway Truck Corporation 24
Standard Railway Equipment Company 25
Stucki Company, A. 52
Symington-Gould Corporation, The ... Inside Back Cover
Texas Company, The ..... Inside Front Cover
Union Carbide Corporation, Linde Company 17
Union Switch & Signal Division of Westinghouse Air Brake Company 50-51
United States Steel Corporation 40-41
Westinghouse Air Brake Company, Air Brake Division 43
Witte Engine Division, United States Steel Corporation 52
Youngstown Sheet & Tube Company 56

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THE CONTINUING OUTRAGE

The Action Page

Is Ivan Smarter Than Uncle Sam?

Yes, the evidence is that, in the vital area of transportation, the USSR is making a lot wiser and more effective use of its resources than the USA is—a difference that could be fatal to our country, if it isn't corrected.

Russia does not have anything like the transportation plant that this continent has — but practically all of its facilities are militarily useful. Most of ours are not.

When there is a shooting war on, there is inevitably a shortage of fuel and manpower. Five men in the crew of a diesel-powered train can move 5,000 net tons of freight that would require probably 300 men, if the freight were moved by truck; and the train will use only a fraction of the fuel that is needed to move an equivalent tonnage by highway.

In World War II practically all long-haul freight was moved by rail (or pipeline)—because there wasn't the manpower or fuel to move such tonnage by highway; and barge service is too slow when needs are urgent.

In this country since World War II, expansion of transportation plant has been almost entirely in highway, waterway and aviation facilities. While railroad plant and rolling stock have been greatly improved in the past decade, total railroad capacity has been shrinking—not increasing.

In another war, America would need more railroad capacity than in World War II—but nothing whatever is being done to permit and encourage the railways to increase their capacity. Russia's transport plant is much smaller than America's—but Russia is steadily expanding its militarily essential transportation, its railroads, while America isn't even sufficiently alert to conserve the railroads it already has.

The threat to the country's safety from shrinkage in its railroad plant; and inadequacy, even in peace time, of railroad service, is fully appreciated by the Defense Department's principal transportation authority, General Edmund Lasher. He has made known his concern several times this year in public addresses. He has, however, limited himself to chiding the railroads for their shortcomings—instead of going out after the real culprits, viz., the administrative, legislative and judicial authorities who are allowing, or helping, the nation's vital transportation sinews to wither away.

•

Russia "plans" transportation on the socialist pattern. There is no free competition — which automatically selects the most efficient producers by people's free choice in the market place. But the Russians do assign transportation jobs to the methods of transportation the planners *believe* can do them best.

Here in America—by not permitting free and equal competition in transportation — we are throwing away our traditional and sure-fire system of guaranteeing efficiency; and "survival of the fittest."

We have no assurance that the socialist system of "planning" will not, in the long run, work better than a chaotic mixture of semi-competition with semi-planning.

WATER IN THE GAS TANK: A Model T Ford that runs will get to its destination faster than a '57 Cadillac with water in the fuel tank. The Russians' system of dealing with transportation by socialist "planning" is intrinsically inferior to free competition in the promotion of efficiency. But socialist "planning," despite its inherent inferiority, may work better than competition which isn't genuine. America's course is neither him nor her. It isn't working. Even if we are so rich that we can afford the economic waste of transportation chaos, we certainly cannot afford the military risk which it entails.

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WRITE FOR ILLUSTRATED BULLETIN J-309

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